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# AIR CONDITIONING AND REFRIGERATION

*News*

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DETROIT

## INSIDE DOPE

by GEORGE F. TAUBENECK

**Gag of the Week**  
How the ECA Will Work  
Generosity Returned  
Our Scrawny World  
Irrelevant Laughs  
Definitions

### Gag of the Week

"Nowadays when a person puts something aside for a rainy day, the government soaks him."—Grit.

### How the ECA Will Work

ECA's supersalesman, Paul Hoffman, has immense vitality which he transmits and transfuses into anyone he confronts. He's almost 60 years old, but you'd never believe it. His light blue eyes are compelling; his mannerisms are eloquent; and his cocked right eyebrow arresting.

Undoubtedly there are smarter men in the world, but he's a salesman of the old school.

He'll need all that sales personality. Already the government wolves are closing in for the kill. When he arrived in Washington, he was confronted with 17,000 applications from bureaucrats for jobs in his new bureau. And the first thing he was told:

"Every decision you make, every paper you sign, is likely to be attacked later by a Senate Investigating Committee."

No wonder his wife thinks he's crazy.

Outside of food, all purchases of "Marshall Plan" stuff will be placed through regular trade channels in the United States by the foreign beneficiaries of our largesse.

And, in the main, these purchases will be of commodities and equipment which are "multipliers." That is, they'll help the recipients multiply their own output of desperately needed goods and services. Once received and put to work, these tools will multiply the efforts of workers and scientists and thinkers and managers in the harassed, hungry "taking" nations whose economies we are buttressing. Thus, it is hoped, our contributions will redound to our own benefits as well as to the "taking" nations.

On the other hand, some of these export shipments will be "dividers." They'll handicap our domestic economy. Steel is a prime example. Freight cars and trucks add up to another. These items we need over here, as fast as we can get them.

Wheat we can spare; steel, no. Wheat is a "multiplier" because well-fed workmen abroad produce more coal, steel, and manufactures.

Scrap iron and steel we can't spare; these are "dividers." So we probably shan't ship them abroad. After all, the fought-over countries have mountainous graveyards of miscellaneous scrap metals to draw upon. Let them collect and re-use these at-home supplies!

Electrical equipment we need over here, too. That's why the ECA may screen down the Council of European Advisers' demands for five billion dollars worth of electrical power systems from this country to an initial contribution of one hundred millions dollars worth of American equipment.

In this instance, it is observed that local natural resources—such as abundant water power for hydro-electric development—can be harnessed. Steam from an active volcano will power one tremendous new Italian electricity-generating system!

### Generosity Returned

Most of us take it for granted that all the food, machinery, steel, oil,  
(Concluded on Page 10, Column 1)

## Returnee From a ERP Selling Trip Is Pessimistic

LONDON, England—The European Recovery Program (ERP) will not result in substantially increased export sales by American manufacturers of refrigeration equipment and household appliances if the recent experiences of some of them are any test.

After visiting nearly all of the 16 countries covered by ERP, a representative of a refrigeration company is on his way home with only one order of any consequence. He left here with other U. S. businessmen who reported similar failures.

"When Congress passed ERP," the sales representative told *The New York Times*, "it seemed logical to expect that many of the nations would relax import restrictions that have prevented us from selling home and commercial refrigeration equipment."

"This has not been the case. Except for one fair-sized order from southern Europe, my trip has been a disappointment."

The *Times* said the American embassy and the American Chamber of Commerce here heard the same story from export salesmen seeking to establish or revive outlets for such  
(Concluded on Page 37, Column 1)

## Electrical Firms May Get Wage Settlement Soon

NEW YORK CITY—The probabilities of settlement-without-strife in the wage negotiations between two major producers of electrical appliances and equipment and the UEW-CIO looked brighter this week, with General Electric Co. making an 8% increase offer, and Westinghouse resuming negotiations which had broken off April 22.

How wage increases by major manufacturers of refrigerators and appliances may affect prices is a matter of conjecture. Asked whether G-E felt that its 8% wage increase offer would lead to upward revision in its price list, L. R. Boulware, vice president in charge of employee relations, replied that—

"Acceptance of the pay increase by the union will necessitate a prompt price review to see what is indicated in the circumstances." Boulware also pointed out that a general lifting of wages in basic industries would mean an increase in the price of the materials that go into G-E's products.

For individual workers the increase proposed by G-E would range from 9 cents to more than 15 cents an  
(Concluded on Back Page, Column 4)

## Court's Ruling Hits Cooling Effect on Adjoining Premises

PHILADELPHIA—What the air conditioning system in the restaurant next door did to his wall and wallpaper shouldn't happen to a haberdasher. So thought Benjamin N. Banks here and Common Pleas President Judge Frank Smith agreed with him.

After personally inspecting the party wall separating Banks' haberdashery and home from a Horn & Hardart restaurant, Judge Smith declared the air conditioning unit in the restaurant to be a nuisance. He added that if Horn and Hardart did not file exceptions to his findings within 30 days, the firm would automatically be enjoined from using it.

Banks in his petition to the court had charged that suction from the air conditioning unit caused air to pass through the party wall defacing the wall and covering it "with multitudinous tiny cracks." He added that "the wallpaper is filled  
(Concluded on Page 37, Column 3)

## Engineers Debate on 'High Humidity' In Household Models

By C. Dale Mericle

SWAMPSCOTT, Mass.—The desirability of maintaining high humidities and low air movements in household refrigerators to improve food preservation was broadly implied in a paper prepared by S. V. Cook and F. F. Starr of Frigidaire and presented by L. R. Klopfer of Frigidaire before the spring meeting of the American Society of Refrigerating Engineers here.

The implication, however, that all household refrigerators should have such properties was disputed by W. L. Timmerman of General Electric Co., who pointed out that "minimum-priced refrigerators still have the temperature necessary to preserve food."

"Deluxe refrigerators have more convenience features, and I class high humidity as a convenience feature," Timmerman declared. "The user can still cover dishes in a minimum-priced box to achieve this high humidity. And there are many items, such as bottled goods, which don't require high humidity."

"It is also difficult to control this 80% relative humidity in the varying  
(Concluded on Page 2, Column 5)

### Patrons In a Panic

## Five Locker Plants In Suburban N. Y. Area Hit By Financial Failure

WHITE PLAINS, N. Y.—What happens when a refrigerated locker storage plant goes bankrupt and the electric utility company prepares to turn off the power for the plant?

This situation is not a theory, but a fact, in the case of five plants in this area which have been operated by American Frozen Food Lockers, Inc. The plants are located in Rye, Bronxville, White Plains, and Larchmont, N. Y., and Greenwich, Conn. American Food Lockers, Inc. went into receivership and the Westchester Lighting Co. served notice late in May that it was preparing to cut off the power for the plants.

When word of this got around among those who have rented food storage lockers in these plants, virtual panic set in. Most of the locker holders started a frantic search for other locker plant space in the

## Demand Holding For Appliances, Survey Reveals

### Federal Reserve Board's Study Shows 10 Million Purchases Planned In '48

WASHINGTON, D. C.—If buying plans of the nation's 48,400,000 families are carried out, there will be no let up in the demand for consumer durable goods this year and sales may even hit new peaks.

The third annual survey of consumer finances made for the Federal Reserve Board shows that approximately 10,550,000 families intend to purchase refrigerators, washing machines, radios, and furniture in 1948. This compares with 9,700,000 planning such purchases in 1947.

However, the number of families who actually purchased these items last year totaled 17,000,000. So if the ratio of planned purchases to actual purchases this year follows  
(Concluded on Page 37, Column 2)

## Ballantyne, Balderston Take Top Philco Posts

PHILADELPHIA—At the organization meeting of the board of directors of Philco Corp., Larry E. Gubb declined re-election as chairman because of illness, and John Ballantyne, who has been president since 1943, was named chairman of the board.

William Balderston, executive vice president, was elected president, and James H. Carmine, vice president—distribution, was appointed to the  
(Concluded on Page 4, Column 5)

## April Refrigerator Sales Hit 348,461

NEW YORK CITY—April world sales of household electric refrigerators totaled 348,461 for the 11 companies who report to the National Electrical Manufacturers Association.

This was a slight decline from the 356,150 units reported sold in March. Of the April sales, 330,720 were within the United States, and the remaining were export sales.

The 7-cu. ft. size topped all others, but it just barely nosed out the 9 and 10-cu. ft. category (grouped together) with 8-cu. ft. models a close third.

immediate vicinity, but most nearby plants were full or soon filled up, and some patrons even took their frozen foodstuffs to New Jersey and remote parts of Connecticut.

The situation boomed sales of home freezers. One Greenwich dealer sold 15 home freezers in two days when the report got around that the utility might shut off the locker plant's power.

Alessandro L. Chiostergi, attorney with offices at 175 Main St., White Plains, is assignee of the American Frozen Food Lockers, Inc. assets under appointment by Supreme Court Justice Schmidt. He is attempting to find some buyers for the locker plant properties, but when contacted on June 8, had not achieved any success along this line.

However, the power for the plants  
(Concluded on Back Page, Column 3)

## Their Minds Are Wide Open But We Won't Come In

(A guest editorial by J. E. Wilson, Jr.)

THEIR minds are wide open but we won't come in.

Thirty million persons in the United States, it is estimated, could be interested in the family freezer story—if only somebody would take time enough out to tell it to them. It is timely and necessary that this vital story be told now, because:

- ... an uninformed consumer market remains a static one.
- ... a half-informed consumer market is a skeptical one.
- ... a wrongly informed consumer market buys something else.

The pressure of circumstance and existing conditions have opened consumer minds wide, the "Welcome Stranger" invitation is on the doormat of the American home—and yet the freezer industry apparently is only half-heartedly accepting that invitation.

Insure your future prosperity and protect yourself against possible recessions by maintaining that valuable consumer franchise at full strength. If for some reason or other you have allowed it to drift, or it has been damaged, see to it that you rebuild it at once with all speed. You have a gold mine if you work it properly and consistently. You can gain a top competitive position by effective, diligent, imaginative exercising of that valuable franchise. Allow showmanship and dramatization to play an integral part in the development of its potentialities.

Without doubt there is an opportunity today for alert dealers in every section of the United States to expand sales of family freezers to a point never before reached. This can be done if the new sales information now available is applied in a speeded-up selling tempo that is in keeping with public thinking.

Probably not one potential customer in a hundred has ever received any information whatever from manufacturers, dealers, distributors of home freezers. We are really placing the burden of learning about freezers upon the consumer.

I think this is the root of the problem. We are faced with the task of establishing, expanding, and improving our means of communicating with the public. We are adept in the manufacture of a product that no one should be without in times like these, but we are inept in communication of the Home Freezer idea—and of information which creates understanding of our product among people who really need it.

At a time when we could perform a major public service and save millions of people much money and worry by providing them with the newest and best means of food preservation—

(Concluded on Page 20)



**Quicfrez TRIZONE**

**SANITARY'S PREWAR COMBINATION Farm Freezer** is again available for immediate shipment. . . . Suggested consumer price only \$399.50. . . .

**MODEL NO. C-1148**

4½ cu. ft. of 35-50°F. Refrigeration combined with 6¼ cu. ft. of zero frozen storage.  
Size: 48½" W. x 28" D. x 40¾" H.  
Frozen meat capacity—250-300 lbs.  
¼ H.P. hermetic, quiet-type condensing unit  
60 cycle 115 volts A.C.

**SANITARY REFRIGERATOR CO. FOND DU LAC, WIS.**  
ICE REFRIGERATORS FOR MORE THAN 40 YEARS FARM FREEZERS SINCE 1939

## U.S. Thermo Control Charges Infringement

MINNEAPOLIS—The U. S. Thermo Control Co., has filed suit for alleged patent infringement against five Detroit residents doing business as the Frostrade Products. Suit has been filed in U. S. district court, Detroit.

The Minneapolis manufacturer of portable refrigerators for cargo trucks has protested infringement of two patents covering its gasoline-powered cooler units for transport vehicles.

Seeking damages and an injunction against continuation of the alleged infringement practices, the suit names the five Detroit persons who are manufacturing a similar product under name of Frostrade Products.

Thermo Control claims to be the world's largest manufacturer of portable mechanical refrigeration units.

The suit is being handled for U. S. Thermo Control through the offices of Frank A. Whiteley, patent attorney, Foshay Tower, Minneapolis.

## Air Conditioning, Refrigeration Slated for 200-Bed Hospital

WASHINGTON, D. C.—The Veterans Administration has announced the awarding of a \$4,588,905 contract to R. P. Farnsworth & Co., Inc., Houston, Tex. It is for general construction, including air conditioning and refrigeration, on the new 200-bed medical and surgical hospital to be constructed at Marlin, Tex.

## Chain Store Customer Panel Weighs Various Home Appliance Lines

MINNEAPOLIS—All established brand lines of household appliances, including refrigerators, vacuum cleaners, radios, electric irons, toasters, and washing machines are being closely scrutinized by a panel of 10 customer-housewives of Gamble-Skogmo, Inc., which sells to more than 2,200 company-owned stores and dealers outlets throughout the mid-west and west coast.

The customer buying panel is being utilized by Gamble to obtain recommendations and preferences on merchandise lines, many of which are Gamble products, manufactured by Gamble-Skogmo subsidiaries, in competition with nationally advertised appliance lines.

The panel will assist in the development of new lines to be manufactured by the merchandising company. It was selected from women customers in the stores who will rotate among various types of merchandise. Major and minor appliances were the first items placed under study by the panel.

Special consideration was given to appliance design and adaptability to actual household working conditions. Members reported individually and indicated brand preferences, possibilities for improvements, and other detailed criticisms.

## E. G. Sanders Appointed Sales Director at Buxton

LOS ANGELES—David E. Buxton, president of Buxton, Inc., announces that he has selected E. George Sanders of Dayton, Ohio, former president of Morton Show Case Co., as national sales director for Buxton with temporary national sales headquarters at 3120 North Main St., Dayton.

Buxton manufactures commercial refrigerators and dry beverage coolers as well as special commercial refrigeration equipment for food storage, and ships its products all over the world.

Sanders stated that the company is selling its products only to large distributors and exporters and the firm does not sell direct to the trade or dealers.

## Norge, 2 Distributors Sponsor Radio Programs

NEW YORK CITY—Purchase by Norge Division of Borg-Warner Corp. and its New York and New Jersey distributors of two radio programs broadcast over station WNEW-New York City during the summer months has been announced by the station.

The programs are WNEW's "Summer Service" broadcast daily and "The Perfect Program," a musical show heard Sundays from 2 to 2:30 p.m.

"Summer Service" is designed to aid listeners at beaches and on the highways, giving them frequent daily information about summer activities and recreational facilities in and around New York City.

Distributors sharing the programs with the manufacturer are Warren-Connelly Co. (New Jersey) and the Krich-Radisco Co. (New York).

## Engineers Debate--

(Concluded from Page 1)  
weather conditions from summer to winter.

"There is one advantage in having two compartments," Timmerman admitted, "and that is the fact that the defrosting problem is aided."

In presenting the paper Klopfer had emphasized that it is "imperative to protect food against moisture losses."

"Appearance of food is highly important. Good, fresh appearing foods are more nutritious and they are psychologically helpful in that good appearance promotes better digestion."

"It is common knowledge that food keeps better at low temperatures but there are problems in moisture migration from the food. This moisture migration problem can be solved by having optimum conditions of temperature, air movement, and relative humidity," Klopfer said.

"Optimum relative humidity would probably be one which would permit a slight outward movement of moisture from the food. In general, then, we would require low temperature, low air movement, and high relative humidity to minimize moisture migration."

## FORMER, PRESENT CONDITIONS

"Early models of household refrigerators generally held a temperature of 50° F., 55% relative humidity, and an air movement of 10 to 30 f.p.m. To cut moisture migration from the food, the housewife had to store it in covered dishes."

"Today in low-humidity models the temperature is about 40°, while the relative humidity and air movement are still about 55% and 10 to 30 f.p.m."

"In high-humidity models today, however, the relative humidity is about 80%, the air movement is below 10 f.p.m., possibly 1 to 5 f.p.m., and the temperature is held at 40° F. Food can be stored uncovered in these models, whereas the modern low-humidity models still require that the food be covered," Klopfer explained.

Vegetable drawers, even in the low-humidity boxes, present an entirely different picture, however, Klopfer pointed out. In these the relative humidity runs between 92 and 98% with negligible air movement. Food need not be wrapped for storage here.

## STORAGE FOR HOW LONG?

Commenting on general refrigerator storage periods, the speaker pointed out that meats wrapped in waxed paper could be stored for one to two weeks in a 20° F. freezing compartment of a refrigerator. Meat wrapped in paper of low-moisture transmission could be held two to three months at 10° and six to 12 months at 0°.

Comparisons between uncovered food stored for seven days in five low-humidity models and food kept for the same period in five high-humidity models were also cited.

In the low-humidity models, the average figures were 40.9° F. temperature and 54.6% relative humidity. After seven days the food had lost 22.7% by weight and was graded as D+.

Only 6.9% by weight was lost by the food in the high-humidity boxes, on the average and the food was graded at C+. In these models the food compartment temperature averaged 39.8° with a relative humidity of 81.3%.



in  
**MISSOURI**  
THE  
**WORD'S AROUND**

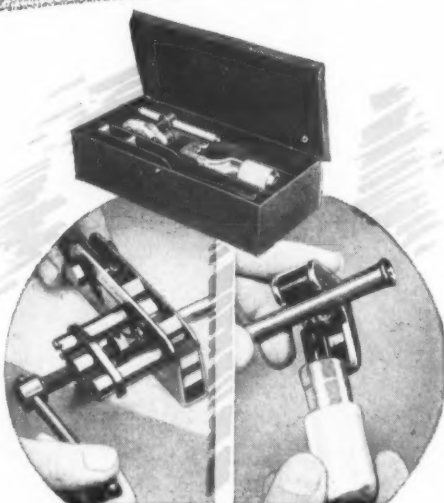
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When people from Missouri ask to be 'shown', Penn tubing makes a 'Superior' showing.

Service men and manufacturers who have to carefully appraise tubing, loudly praise 'Superior'. Penn's finer, extra-dry tubing, with its clean and bright properties, bends as easily as "Old Man River".

In St. Louis, and all along the Mississippi, 'Superior' is the tubing that is getting the 'nod' for its high quality. Available in straight lengths or coils, 1" O.D. to capillary .093" O.D. Give us the word—call, write or wire today.

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The new, modern, metal package protects Papco flaring equipment. For the best cutting and flaring tools, get Papco. Buy the kit or buy either tool, but always buy Papco. Order yours today.

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Walk-ins that grow with the merchant's business



Reach-ins with coiling that is different



A Dry Beverage cooler with quicker cooling



**THE C. SCHMIDT CO.**  
CINCINNATI FOURTEEN OHIO

**PENN BRASS & COPPER COMPANY**  
ERIE, PENNSYLVANIA Phone 35-111





## Retail-Mindedness... in Action!

The new "Automatic Cook" electric range brings further evidence of Kelvinator's Retail-Mindedness *in action!* This great new range is a fitting companion to Kelvinator's revolutionary "Top-to-Bottom" refrigerator which has already been established as the year's outstanding achievement in refrigerator design. Its purpose: to *serve* . . . and to *sell!*

It is a range sparkling with impressive new features evident to retailers and consumers alike. Most striking of all is the new "Top-o'-the-range" control panel . . . set on a convenient angle so that all switches are easy to read and to reach. The "Up-

Down" unit is a Scotch Kettle or a fourth surface unit—which ever you wish. Tilt-Up surface units for easy cleaning . . . even a pressure cooker available to fit the deep-well. Truly, another kitchen masterpiece!

With this great product, engineered for *plus selling-power*, Kelvinator fulfills again the pledge of its Franchise. Here rightly are "revelations in styling . . . advanced utility . . . new steps ahead in efficiency, economy and performance."

Here is further opportunity through which Kelvinator Retailers can build to greater success in the field of appliance selling.

TUNE YOUR RADIO TO EDWIN C. HILL and "THE HUMAN SIDE OF THE NEWS" Monday through Friday . . . another retail-minded contribution to the progress of Kelvinator Dealers.

# Kelvinator — of Course!

... THE MOST VALUABLE FRANCHISE IN THE APPLIANCE INDUSTRY

KELVINATOR, DIVISION OF NASH-KELVINATOR CORPORATION, DETROIT, MICHIGAN



see your **"DETROIT"**  
**WHOLESALE**  
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## Assembly Lines Halt In Tribute To C. W. Nash

BEVERLY HILLS, Calif.—Charles W. Nash, pioneer automobile manufacturer and the man who "engineered" the merger of Nash and Kelvinator in 1937, died June 6 here at the age of 84. He was chairman of the board of Nash-Kelvinator Corp. at the time of his death.

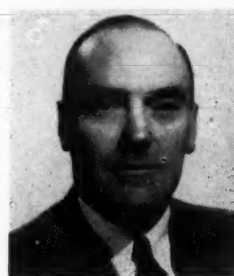
His career was the story of a farm boy who rose through the shop ranks of an old horse carriage company to become a production genius in the early days of the automotive industry, becoming president of General Motors Corp. in 1912.

Nash left General Motors in 1916 to form his own company and to make the automobile which would bear his name. His business was increasingly successful and in 1930 he resigned the presidency of the company to become chairman of the board.

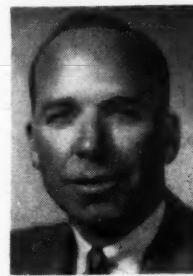
In 1936 Nash asked George W. Mason, president of Kelvinator, to become president of Nash Motors. Mason declined, but negotiations finally resulted in the merger the next year of Nash and Kelvinator, with Mason as president and Nash as chairman.

More than 24,000 employees of Nash-Kelvinator paid a two-minute silent tribute June 10 to the memory of their board chairman. Production lines were stopped at 2 p.m. for the short interval at company plants in Kenosha and Milwaukee, Wis., and Detroit and Grand Rapids, Mich.

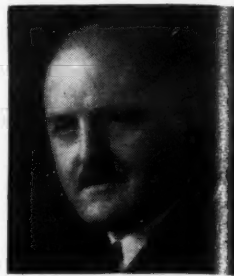
## Take Over Added Responsibilities



JOHN BALLANTYNE  
Board Chairman



J. H. CARMINE  
Named to Finance Committee



WM. BALDERSTON  
President

## Clayton & Lambert Model Awaits Test by AGA Lab

LOUISVILLE, Ky.—The new absorption type refrigerator developed by Clayton & Lambert Mfg. Co. here has not yet been tested by the American Gas Association testing laboratories, the company has announced.

First stories on the new product attributed performance data on the new unit to the AGA laboratories, but the refrigerator has not actually been tested there as yet, the company explains.

Clayton & Lambert, however, says that AGA will shortly be asked to test the product.

## Doan Re-joins Frigidaire As Manager of Appliance Sales In Pacific Region

SAN FRANCISCO — Joseph W. Doan, former manager of the appliance section of Broadway Stores in Los Angeles, has been appointed appliance sales manager of the Frigidaire Pacific region, W. I. Buchanan, Pacific regional manager, has announced.

Doan, who succeeds F. W. Beecher, deceased, first became associated with Frigidaire in 1928 when he served as sales promotion manager of the factory branch in Seattle. He resigned to head his own dealership in Los Angeles. Eight years later he joined the Los Angeles branch and served as district representative, apartment house and quantity sales manager, and then sales promotion manager.

In 1947 he left the Los Angeles branch to become appliance section manager for the Broadway stores chain. He continued in that capacity until his recent appointment with Frigidaire.

## Hotpoint Water Heater Sales May Set Record

CHICAGO—Hotpoint electric water heater sales for the first seven months of 1948 will equal total company sales for 1947, Dwight R. Anneaux, manager of the water heater department, predicted at a meeting of company marketing officials and distributors.

Anneaux reported that a heavy buying upsurge began in April, with current water heater sales maintaining a consistent increase. Although water heater sales normally fall off during July, sales are expected to hold up well throughout the year.

The large scale home building program was cited as a significant factor in stepping up water heater sales. In addition, many utilities are returning to promotion of the electric water heater as an off-peak load builder.

## Bendix Washer To Be Included With New Richmond Apartments

RICHMOND, Va.—The first apartment development to include a Bendix automatic washing machine in each unit is under construction here by the E. G. Taylor Development Co.

In 60% of the homes, the washing machine is included as part of the \$85-a-month rental, while in the balance it is included in the mortgage. The machines were sold by the Farmer Appliance Co.

## Philco Appoints--

(Concluded from Page 1, Column 8)  
finance committee and given increased responsibility in the direction of the corporation's expanding activities.

While Gubb will no longer serve as chairman, he will continue as a member of the board of directors, the executive committee, and the finance committee.

Ballantyne, new chairman of the board, has been president of Philco for the past five years during its period of most rapid growth. Joining Philco in 1934 as treasurer of Philco Radio & Television Corp., he was named treasurer of Philco Corp. in 1940, and from 1941 to 1943, when elected president, he served as vice president in charge of operations and directed the company's conversion to war work.

Educated at the University of Wisconsin and with an extensive manufacturing and sales experience to his credit before he was 30, Balderston, the new president, joined Philco in 1930 to organize the Car Manufacturers' division to handle sales of automobile radios to the motor car industry.

In 1944 Balderston was named vice president in charge of operations of Philco Corp. and in this capacity directed the company's reconversion to civilian production at the end of the war. Since May, 1946, he has been executive vice president.

Carmine joined Philco as a member of the sales organization in 1923 and is completing 25 years of service with the company in positions of increasing responsibility. After serving as district representative in Pittsburgh, he became manager of the company's east-central division with headquarters in Buffalo and later in Cleveland, and in 1932 he was appointed sales manager of the Middle West with offices in Chicago. In 1939 he came to the home office of Philco in Philadelphia as assistant general sales manager and in 1941 he was made general sales manager. The following year he was elected vice president in charge of merchandising and early in 1948 was elected vice president—distribution.

## Household Dollar Volume Jumps 30-75% In East

NEW YORK CITY—Refrigerators are selling like hot cakes these days. Dollar volumes in the past two weeks have jumped 30 to 60% in department stores and 40 to 75% in home furnishing stores, the New York Times recently quoted buyers and merchandisers as saying.

Big demand appears to be for 6 and 7-cu. ft. models in the \$200 to \$265 price range, the paper declared. Even lesser known makes are moving off sales floors as dealers find that they can promise only 30 to 60 days delivery on "name" brands.

One retail appliance executive found it "almost hopeless" to ask for a "name" brand refrigerator in this size and price range in five Pennsylvania cities. Larger and more expensive models, however, are still available on immediate or two-week delivery, he noted. So are comparatively unknown brands of any size or price.

## Dinegar Named Assistant Head Of Sales at Eureka Williams

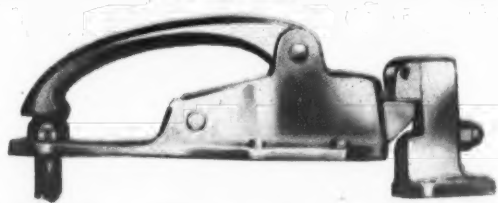
BLOOMINGTON, Ill. — Appointment of Henry A. Dinegar to the position of assistant sales manager has been announced by A. L. McCarthy, executive vice president and sales manager, Eureka Division, Eureka Williams Corp.

In addition to his new duties, Dinegar will continue in charge of Eureka's export activities.

# Open up!

## ...TO THOROUGH SATISFACTION

### Two heavy duty veterans

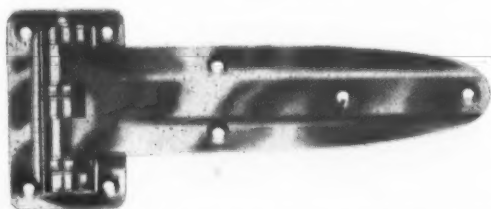


UNIVERSAL COOLER LOCK No. Z-325

CAST BRONZE

FINISH—NICKEL OR CHROME

WEIGHT—11 POUNDS



DOUBLE BALL BEARING HINGE No. 1012

CAST BRONZE

12 INCH BLADE

FINISH—NICKEL OR CHROME

WEIGHT—7 POUNDS PER PAIR

A full range of sizes for all needs.

These husky,  
well balanced units  
are the kind of  
hardware you can  
forget about—knowing  
that they will do  
their job quietly  
and efficiently.

Write for catalog of the complete Arcade line

# ARCADE

MANUFACTURING DIVISION  
ROCKWELL MANUFACTURING COMPANY  
FREEPORT, ILLINOIS







# leads again...

with **THERMOPANE GLASS DOORS**  
in stainless steel  
**REACH-IN BOXES and WALL CASES!**



**MAXIMUM VISIBILITY!  
GREATER SELLING POWER!**

**THE REFRIGERATION OF TOMORROW  
Today!**

Here is another first for Victory's engineers and designers in producing Vimco refrigerated cases that will serve you more efficiently.

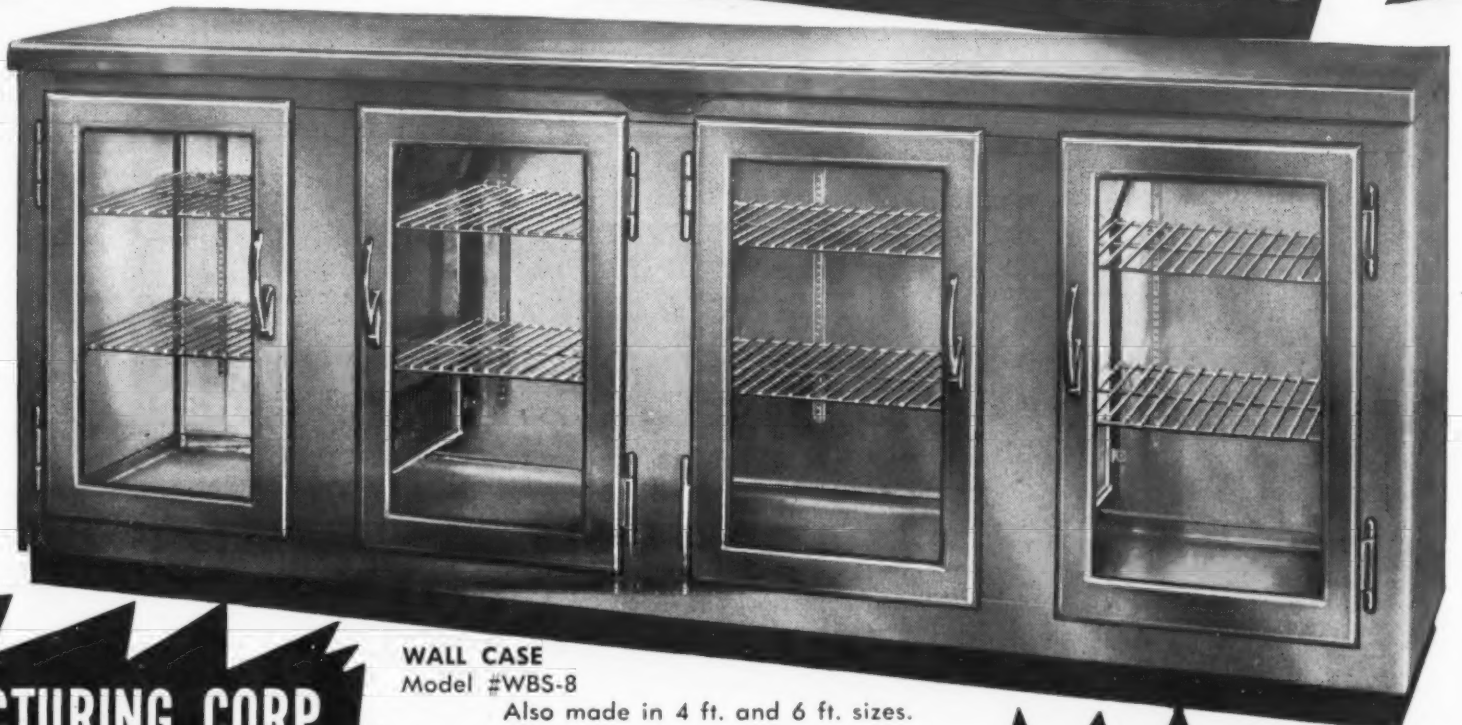
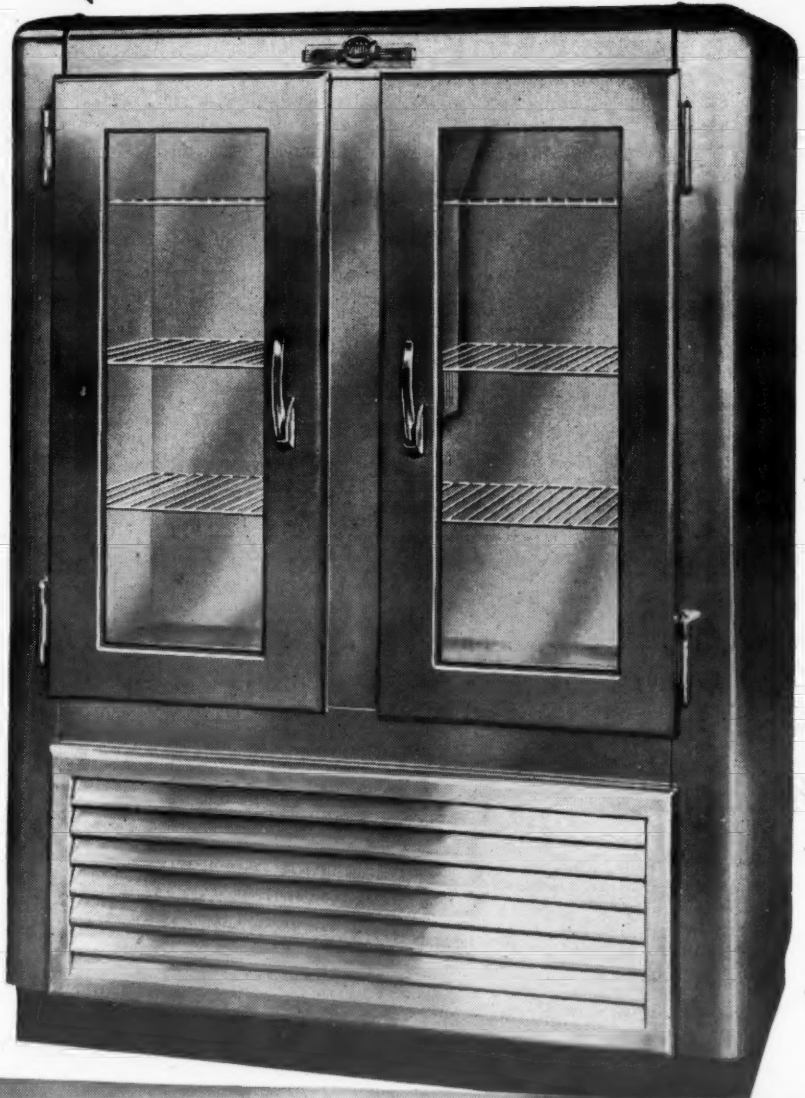
It was this staff that gave the industry the *first and only complete line of 100% metal-constructed stainless steel cases.*

Victory was also the first to make highest quality stainless steel cases under straight line production methods, reducing construction costs and giving you the greatest legitimate value on the market.

No other case manufacturer has made such phenomenal growth as Victory, producing more stainless steel cases than any other concern in the country. This great record and the constantly increasing demand is due to the indisputable fact that Victory makes cases of superior construction and streamlined beauty that give longer and more dependable service.

Before you buy, get all the facts about Vimco 100% metal-constructed stainless steel cases. Please send for catalog of the complete line.

**REACH-IN-CASE**  
Model #RS-20B  
with blower also  
made in 30-42-  
47-65-70 and 90  
cu. ft.



**WALL CASE**  
Model #WBS-8

Also made in 4 ft. and 6 ft. sizes.

**Victory METAL MANUFACTURING CORP.**  
1300 S. FRONT ST., PHILA. 47, PA. • FULTON 9-3132

Export Division, 39 Broadway, New York 6, N. Y. Direct Factory Representatives in all principal cities



## Every Building— BIG OR LITTLE—IS YOUR PROSPECT FOR BIG OASIS PROFITS

Your electric water cooler market is getting better all the time! Even small offices and plants, where only four or five people are employed, are demanding the refreshing, healthful advantages of properly cooled water. With OASIS Electric Water Coolers, you have the right answer—the profitable answer—to every one of these thirst problems. Models and sizes for every need . . . air-cooled and water-cooled types . . . bubbler, glass-filler and combination models . . . bottle-type coolers . . . models for AC or DC operation—all built by the world's largest maker of electric drinking water coolers! Write for the full story! The Ebco Manufacturing Co., 401 W. Town Street, Columbus 8, Ohio.



## Toledo Dealers Back Cooperative Drive For Recruiting New Appliance Salesmen

By John O. Sweet and George M. Hanning

### To Men Interested in a Profitable Career

Salesmen of Major Electric Appliances  
earn more money than most of their  
friends and neighbors . . . in pleasant  
and interesting work.

The same kind of profitable career may  
be available to YOU! Read about it here

The electric appliance industry needs outstanding young men and  
women. It offers them a chance to avail themselves of the good  
things in life—higher than average income, a dignified and  
respected position, an interesting and pleasant occupation.

If you are already employed and are looking for an opportunity to  
earn more and get ahead faster, you owe it to yourself to investigate  
this unusual offer. If you are interested in profitable part-time  
selling, you may still be eligible.

The sale of major electrical appliances already amounts to more  
than \$2 billion dollars per year; yet there is a constantly increasing  
demand for television sets, radios, refrigerators, and other modern  
appliances, and all the other new labor-saving devices and comforts for  
the home that are constantly being introduced. The potential  
earnings for people in this industry are enormous.

Even if you have never sold anything before, you may be qualified  
for this type of sales career.

No previous experience is necessary. If you have a good appearance,  
a pleasing, persuasive personality, a genuine liking for people,  
and the ability to meet them and talk to them easily, if you have at  
least a high school education, you may be qualified for such a  
position right here in your own community.

You may be given a valuable  
Scientific Aptitude Test—FREE

To determine for yourself whether you have the qualifications for  
this type of work, you may be given an absolutely free, and with no  
obligation on your part—a scientific aptitude test especially pre-  
pared for you by a nationally known personnel institute. This test,  
which would cost you a considerable amount of money if you  
should take it "on your own," will be of tremendous personal  
benefit to you, whether or not you are qualified for one of these  
positions.

Apply NOW at address below:  
Once you are accepted, you will be given the additional benefit of  
interesting, intensive sales training—absolutely free, and with no  
while you are earning! Such an opportunity may never come your  
way again. It is certainly worth your thoughtful consideration.  
Why not drop in and let's talk it over—without delay!

TOLEDO APPLIANCE DEALERS' ASSOCIATION  
Central Interviewing Office  
476 EDISON BUILDING

Drive to recruit 42 salesmen requisitioned thus far by 19 Toledo appliance dealers was launched with publication of this advertisement in a local newspaper. The advertisement, plus radio announcements, drew 40 prospects to central agency for interviews.

licants are sent to dealers who want salesmen.

3. Dealers interview qualified applicants and make arrangements for any applicant they want to employ to take aptitude tests at the central agency.

4. Aptitude tests are forwarded to The Personnel Institute at one of their national offices. A complete analysis of the applicant is returned to the dealer within 24 hours. The report either recommends or does not recommend the applicant.

5. If The Personnel Institute report recommends the applicant for employment, the dealer confirms previous arrangements for the applicant's employment and training.

6. If The Personnel Institute report does not recommend the applicant for employment, the central agency sends the dealer additional applicants. The rejected applicant is no longer considered.

### Utility Central Agency

C. C. Simpson, managing director of NERA, presented the plan last March to the board of directors of the Toledo appliance group. The board approved the plan. The Toledo Edison Co., an associate member of TADA, agreed to act as central agency.

The plan was then introduced to Toledo appliance dealers at a dinner meeting, paid for by 16 local distributors who agreed to cooperate in getting the program started. General approval was expressed by the dealers, 19 of whom subsequently requisitioned 42 salesmen.

A team of Edison officials took over from there. The team, working under the supervision of Vice President Charles E. Harrison, consists of J. F. More, advertising manager; Frank Keith, assistant personnel

manager; and A. W. Hall, dealer contact man.

To launch the program, the utility, at its own expense, ran three display advertisements of 42 column inches each in the *Toledo Times* and *Sunday Times*. It also arranged for six five-minute radio announcements over a local station, WTOL.

All advertising was done in the name of the dealers' association. Edison's name was never mentioned.

Copy was prepared by a Toledo advertising agency, Charles F. Dowd, Inc. It was patterned after suggested copy written by Weiss & Geller, national advertising agency, in cooperation with NERA and The Personnel Institute.

Headed "To Men Interested In a Profitable Career," the newspaper advertisements pointed out the opportunities in major appliance selling. They emphasized free aptitude testing and free sales training. Radio advertising followed the same theme.

Forty men responded to these initial appeals. They were interviewed by Keith, who is handling all screening and testing of applicants.

After learning the nature of the work involved, only 10 of the 40 indicated a desire to be considered further.

### 25 Not Interested

According to Keith, 25 lost interest immediately because of a dislike for house to house selling, unwillingness to sell on a straight commission basis, or the lack of a car (required by most dealers). Five others were already earning salaries in five figures and were apparently looking for executive positions.

The remaining 10 filled out "personal history inventory" forms, one of three supplied by The Personnel Institute for use in screening applicants. (When one applicant was asked to fill out the five-page "inventory," he looked over the voluminous inquisitive form and declared, "I

(Concluded on Page 8)

## AMAZING NEW TYPE HOME REFRIGERATOR!



### TABLE HEIGHT

Fits any cabinet ensemble and adds another work table.

### FROZEN FOOD STORAGE

An extra-cold storage space for frozen foods.

### FRESH FOOD STORAGE

Cold wall principle. Moist cold. No food needs covering.

Artkraft

## LOW-BOY REFRIGERATOR

A SUDDEN DEMAND for this different kind of home refrigerator has opened an entirely new field for sales.

To owners of small kitchens, where space is at a premium, the idea of a refrigerator which also serves as a work table is a blessing.

The compact LOW-BOY fits into any kitchen ensemble and stands flush with cabinets, sink, or stove. As a refrigerator it compares with the best. The LOW-BOY has two separate storage compartments—each maintaining a different temperature.

The large compartment is kept at regular temperature for storing food in daily use and is constructed on the cold wall principle. No foods need to be covered. The small compartment is extra cold for storing frozen foods. The LOW-BOY is really two refrigerators in one—with a work table thrown in for good measure.

Manufactured by Artkraft Mfg. Corp., Lima, Ohio

## DISTRIBUTORS write or wire!

Territories are being closed fast. If yours is still open, you can make a profitable connection, as we can make immediate deliveries. Write or wire for specifications, prices and discounts.

The Artkraft Low-Boy is sold exclusively in United States by  
**THOMAS W. BERGER, Inc., 6 East Fourth St., Cincinnati 2, Ohio**

### DEALERS, ATTENTION!

EXTREMELY LOW-PRICED, ROOM SIZE

### AIR

### CONDITIONERS

Available Now for Immediate Delivery!

Universal Compressors—Nationally Advertised—1/2 H.P., AC-110, 60 Cycle Motors

### SEIDEL

WHOLESALE DISTRIBUTORS

3524 WASHINGTON AVE., ST. LOUIS 3, MO.

insist on  
genuine

Marlo

products

MARLO-HEAT TRANSFER  
Since 1925

Wall WIRE  
PRODUCTS COMPANY

PLYMOUTH • MICHIGAN

Makers of  
REFRIGERATOR SHELVES • STAMPINGS  
FORMED AND WELDED PRODUCTS

A Stainless Steel Shelf  
never marks. It does not  
discolor. It can not "wear  
through." It will not  
rust.



KEEP PLUGGING FOR SALES BUT HOLD THE LINE

ON TERMS. THAT'S WHAT A SUCCESSFUL OPERATOR

ADVISED CRMA MEMBERS AT THEIR SPRING MEETING.

IT GOES FOR NCRSA MEMBERS TOO. WHILE

TIME-PAYMENT SELLING IS AN INDISPENSIBLE

TOOL FOR INCREASING VOLUME AND PROFITS,

DOWN PAYMENTS AND MATURITIES MUST BE KEPT

IN SENSIBLE BALANCE. YOUR COMMERCIAL CREDIT

REPRESENTATIVE OFFERS PLANS THAT WILL

HELP YOU HOLD THE LINE AND GET THE SALES.

CALL ON HIM FOR SERVICE.

## COMMERCIAL CREDIT CORPORATION

*A Subsidiary of Commercial Credit Company, Baltimore*

MORE THAN 300 OFFICES IN PRINCIPAL CITIES OF THE UNITED STATES AND CANADA



## 40 Answer 1st Toledo Call for Salesmen; 10 Screened Out for Interviews with Dealers

(Concluded from Page 6)

don't want a job that bad!")

A second form permits Keith to rate the applicant on observable personal characteristics. The third form is a work reference investigation sheet that is sent to former employers of the applicant.

Keith declared that he was very pleased with the high caliber of men who responded to these initial appeals. From those who filled out questionnaires, he drew this general picture:

As required in the advertising, all had a high school education or better. Almost all were working in local factories at present. Only two had had any previous experience in appliance sales.

Most of the men were young, averaging between 32 and 35 years old. They had their eye on the future and wanted to know what opportunities lay beyond the "door bell pushing" stage. Some indicated that they eventually planned to go into business for themselves.

As this story was written, the men were being interviewed by their prospective employers. This is how applicants and employers are matched up by Keith:

After his interview, the applicant is shown a list of dealers who have requested salesmen. He is permitted to choose the dealer he thinks he would like to work for. If the applicant seems to meet the requirements established by that particular dealer, he is sent to see the dealer.

However, if the applicant does not

meet the dealer's requirements (such as having a car, being of a certain age, being married), Keith calls the dealer. He tells the dealer that the applicant wishes to work for him but lacks certain requirements. Explaining where the man differs from the prescribed standards, he asks whether the dealer would interview the applicant anyway. If the dealer says yes, the applicant is sent out.

If, on the other hand, the dealer does not want the applicant, the latter is channeled to another dealer whose requirements he can meet.

So far, a few of the applicants have been tentatively hired by dealers and are ready to take their aptitude tests. Other tests will be given as applicants are accepted.

The opportunity to requisition salesmen still lies open to dealers, whether or not they belong to the local association. Two non-members are already participating.

A dealer who wants men is supplied by NERA with a special requisition form and an instruction sheet that will aid him in interviewing applicants. On the requisition form, the dealer lists the qualities he desires in a salesman and the minimum compensation the salesman can expect to receive.

The form also contains an agreement that the dealer, at a cost to himself of \$15, will have the applicant he selects take the aptitude tests prepared by The Personnel Institute.

After the applicant has been recommended by The Personnel Institute

and hired by the dealer, he is to receive a sales training course. NERA recommends use of the Edison Electric Institute's basic sales training course on major appliances. The national group has also indicated that it will supplement this by making available sales training for radios and small appliances.

Details of the sales training plan to be used locally, however, have not yet been settled.

NERA advises dealers to place the applicant on their sales staff immediately. If the dealer waits until the applicant is trained, the man may change his mind and go into some other field, association officials point out.

TADA President Norton thinks that the NERA plan will be a boon to busy dealers. One extra salesman could double the volume of many dealers, he declared.

"The dealer is usually so busy that he does not have time to properly interview new men and, as in my own case, puts off hiring because of that. Also through the NERA plan, the dealer is assured that he will receive a higher caliber salesman than he would probably get by depending on his own first impressions of a man."

### Vacuum Promotion Sucks 'Em In

SYRACUSE, N. Y.—E. W. Edwards & Son recently drew heavy traffic to its Appliance Center when it offered a free dust pan to anyone coming to the center and taking a look at a new type of vacuum cleaner.

Visitors were not required to buy anything. They were merely requested to spend 30 seconds looking at the new cleaner and to present a coupon bearing their name, address, and the type of cleaner they own.

### New Man Gets 'Inside Dope' from Boss



One of the first prospective appliance salesmen scheduled to take aptitude tests under the NERA Sales Personnel Plan now being field tested in Toledo is Joe Kolvey (left), former deliveryman for a local dairy. While awaiting tests, given by Toledo Edison Co. acting as central agency for local dealers, Kolvey gets sales pointers from his new employer, Frank Rogers, owner of appliance outlets in suburban Maumee and Perrysburg.

### Sales Reported Up 151% On New Bendix Washers

SOUTH BEND, Ind.—Introducing new models and lower prices has caused dealers' sales of Bendix automatic washers to soar an average of 151%, declares Parker H. Erickson, director of sales for Bendix Home Appliances, Inc.

The average gain in business was recorded in the four weeks following the introduction of new models and announcement of lower prices, compared with the average weekly sales for the seven preceding weeks.

Establishment of a "leader" price on the company's first postwar models—the S-101 at \$199.95 and the B-201 at \$219.95—proved to be a traffic and sales producer and resulted in back orders on most of the seven models, Erickson said. The company introduced a full new line of automatic washers ranging from \$229.95 for the standard to \$319.95 for the Gyromatic with automatic soap injector.

### Output of Television Sets In 1st Quarter Triple Shipments

WASHINGTON, D. C.—Television manufacturers produced nearly three times as many sets as they shipped during the first quarter of 1948, the Radio Manufacturers Association reported recently. Their output for the quarter was greater than their total shipments since January, 1947, RMA figures showed.

Production for the quarter was estimated at 300,000 sets. Shipments for the same period were 106,136 sets.

### 15-Cent Dividend by Admiral

CHICAGO — Ross D. Siragusa, president of Admiral Corp., announces a 15-cent dividend payable June 30.

In announcing this dividend Siragusa explained that Admiral sales in the radio field is at an all-time high. The demand for Admiral television receivers far exceeds present production capacity, he stated.

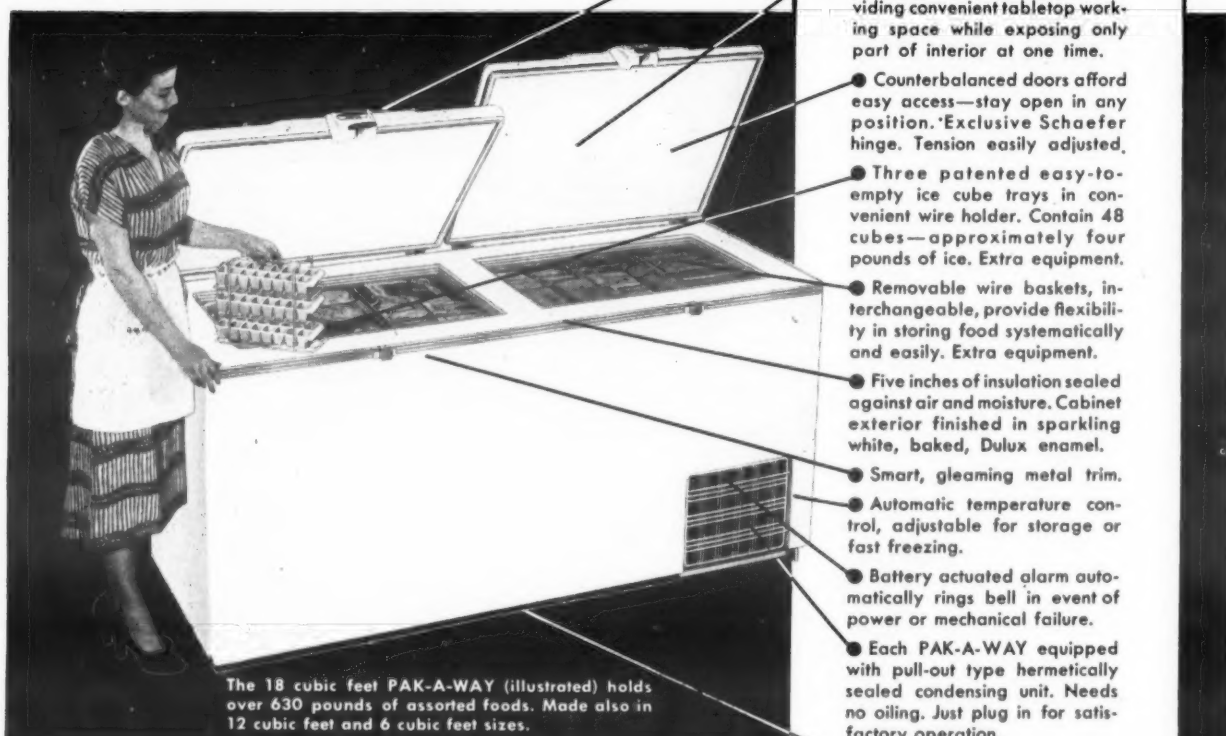
VISIT US  
during  
**JULY MARKET**  
JULY 5-17, 1948  
SPACE 17-K  
AMERICAN  
FURNITURE MART



TRADEMARK REGISTERED

# HOME FREEZER

- Nationally Advertised
- Strong, Unusual Promotion
- Competitively Priced
- Liberal Discounts



The 18 cubic foot PAK-A-WAY (illustrated) holds over 630 pounds of assorted foods. Made also in 12 cubic foot and 6 cubic foot sizes.

**THE WORLD'S Finest  
HOME FREEZER**  
product of Schaefer's  
experience in building  
low temperature cabinets  
since 1929.

- Sturdy latch of exclusive Schaefer design is equipped with built-in door lock.
- On PAK-A-WAY "12" and "18" two insulated doors may be opened individually, thus providing convenient tabletop working space while exposing only part of interior at one time.
- Counterbalanced doors afford easy access—stay open in any position. Exclusive Schaefer hinge. Tension easily adjusted.
- Three patented easy-to-empty ice cube trays in convenient wire holder. Contain 48 cubes—approximately four pounds of ice. Extra equipment.
- Removable wire baskets, interchangeable, provide flexibility in storing food systematically and easily. Extra equipment.
- Five inches of insulation sealed against air and moisture. Cabinet exterior finished in sparkling white, baked, Dulux enamel.
- Smart, gleaming metal trim.
- Automatic temperature control, adjustable for storage or fast freezing.
- Battery actuated alarm automatically rings bell in event of power or mechanical failure.
- Each PAK-A-WAY equipped with pull-out type hermetically sealed condensing unit. Needs no oiling. Just plug in for satisfactory operation.
- Recessed toe space at base provides easy access to foods.

SCHAEFER, INC.  
MINNEAPOLIS 1, MINN.

DEPT. P-801

Please send us complete details regarding dealership ☐ distributorship ☐ for Pak-A-Way Home Freezers.

My name.....  
Firm.....  
Address.....  
City..... State.....

**Schaefer**  
MINNEAPOLIS 1, MINN.



## The FOGEL Dry Storage "Bottled Beverage" Cooler



MODEL 3900



### "A SURE HIT"

It's bound to be a sure hit for any dealer looking for an opportunity to raise his sales average. FOGEL'S Dry Storage "Bottled Beverage" Cooler out hits all other coolers in dealer sales because it is...

1. Constructed of durable, all-welded steel.
2. Economical and efficient to operate.
3. Dry, clean, and modern.
4. A real space-saver.
5. Heavily insulated for complete customer satisfaction.
6. Engineered for heavy usage in all climates.

The FOGEL Dry Storage "Bottled Beverage" Cooler has outstanding eye appeal... eye appeal that means sales. It is so attractive that it can be used out in the open as well as under a bar. Feel welcome to write for further information concerning these, or other, FOGEL Quality-Engineered refrigeration items.

Now Available for Immediate Delivery  
One franchise gives you a complete commercial refrigeration line.

**FOGEL REFRIGERATOR COMPANY**  
5400 EADOM STREET • PHILADELPHIA 37, PA.  
Quality manufacturers, for almost one-half century, of Display Cases, Reach-Ins, Walk-Ins, and Freezers.



# Thorough Training In Fundamentals Equips Salesman To Sell Customer with Confidence

BUFFALO—Five suggestions for a sales training program that will equip the salesman to interpret the value of his product in terms of the customer's needs were outlined recently by J. M. McKibbin, assistant to the vice president, Westinghouse Electric Corp.

His five pointers were:

1. Recruit enough salesmen to handle your markets.
2. Organize the break-in training of your recruited sales manpower.
3. Get receipts for your training.
4. Keep your training program continuous.
5. Equip your salesmen for the job.

"As manufacturers and distributors," McKibbin said, "we cannot concern ourselves with the question as to whether salesmen are made or born. Today our responsibility is to make sure that our salesmen are thoroughly and adequately trained—to know their product, markets, and the problems in the industries or with the customers they serve.

"They must be able to present clearly, forcibly, and yet tactfully the value of their products and services. Confidence in selling begins with a thorough knowledge of a salesman's job—the planning and direction he is given in serving his customers.

"To any business he represents, the most important contact of that business is with its markets. In fact he is your company in the eyes of many customers.

"Our job is, then, to make sure he has the training and tools necessary to effectively do his job to move products from your shelves.

"Obviously, the first job any distributor must concern himself with is having sufficient salesmen to cover the territory he serves. A salesman with too big a load only scratches the surface of his customers' needs.

"Often times he is unable to do the kind of creative selling that must be accomplished to get a customer to realize that he needs your product or service, and this requires a keen analysis of sales manpower to make sure that each salesman is given the load he can carry.

## Break-In Training

"After careful selection of sales manpower, the first step in a training program is break-in training."

McKibbin noted that his company has set up a distributor sales training course for new sales recruits selected by its distributors. Before they are given any sales training on electrical equipment, they are enrolled in a concentrated three week course on engineering procedure and engineering terminology that will give them a basic knowledge of electricity and its applications.

"After this basic course in the fundamentals of electricity, the students were ready for the actual 'sales training laboratory.' . . . In this laboratory we set up all the visual training aids and working models so that these sales recruits could actually see the product, learn its features, and study its application in the field.

"Each class in working sessions completely selects, applies, and prices every product they sell as distributor salesmen.

"Each week one day is devoted to the techniques of sales presentation. On this day the student is given a problem of interpreting or selling to a simulated customer the products that he has studied in technical terms during the week.

"The assigned problem may require him to sell to a purchasing agent, another to an engineer, still

another to a maintenance man. We set up the conditions and the student makes the presentation of his product in terms of the 'you' values to the customer.

"This break-in training is a 16 week practical course in selling.

"We have trained 186 men and obtained receipts for this training in the form of daily and weekly quizzes. Then they have a final examination that covers the entire 16 weeks. The average grade of these 186 men has been 97.4.

"I might add that we follow the progress of these men as they go out into distributor houses and they have been very successful.

"When salesmen leave the break-in period, they really start continuous training for life."

For this part of the program, McKibbin said, Westinghouse developed a "Product of the Month"

training schedule. The story of a single product or service is broken down to simple terms and distributed through slides and movies to all distributors throughout the country.

Though a controlled, or canned, story is told, he said, each distributor can localize the sales opportunities for that product. Beyond telling the salesman about the product and informing him of its market possibilities, emphasis is placed on getting him to sell more of it during the next month.

"Once a salesman has retold the story, it becomes part of his sales vocabulary," McKibbin asserted. "He will search out opportunities to retell the story. It is human nature that we talk about things we know most about."

In addition, when it was found necessary, the company has developed whole courses to a single subject and had even broken down the courses to cover a single phase of a subject.

"The point I want to make is this," McKibbin stated, "train the salesmen thoroughly in the fundamentals of a product and its application and you give him the confidence he needs to sell it properly.

"Keep the salesmen fully informed so that they have all the facts about the products and sources they need to sell your products, and do it with all the techniques of visual training—motion pictures, demonstrations, sound slide films, and animated models to make this training brief and to the point.

"While a sales meeting or training program might do an excellent job of presenting the product, that's only half the battle. Too many of us fail to recognize that what we say in the meetings will have to be retold outside by the salesmen to the customers.

"A training program is complete only when it provides the selling tools a salesman needs to tell and sell the customer. These tools should be easy to handle and use—bulky equipment and catalogs hinder a salesman's efficiency.

"Make sure that any demonstrator or other selling aid is one a salesman will really use. In our case, we always make preliminary field checks on our sales demonstrators and promotional tools to make sure they have the confidence and vote of the salesmen who must use them."

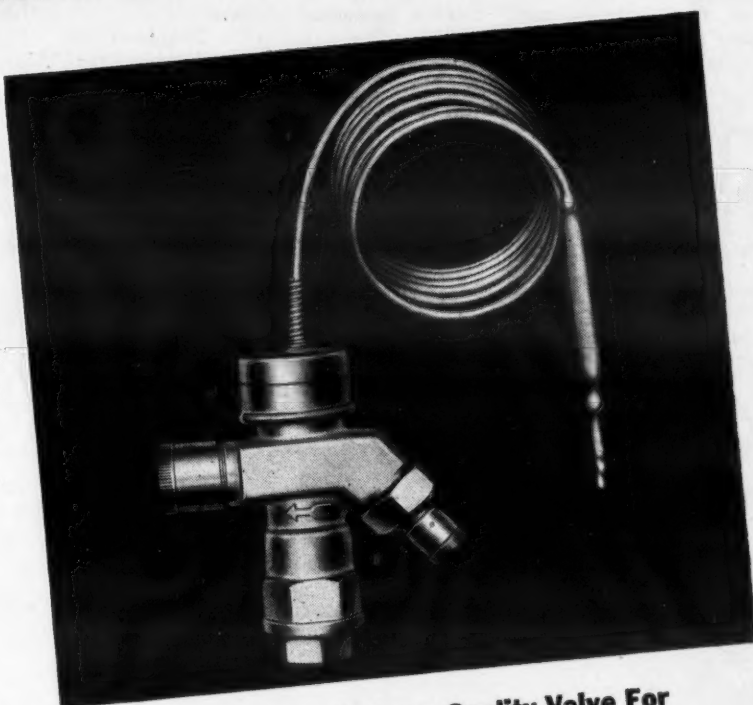
## FRIGIDAIRE MODULEX THERMOSTATIC EXPANSION VALVES

Precision-built for dependable and accurate operation. Warranted for one year. Now in plentiful supply.

Frigidaire Modulux valves set a new high standard for efficient temperature control. Because they are super-sensitive to changing load conditions, and permit operation of cooling units at the most efficient suction pressures. More, these valves give the serviceman complete flexibility on the job. For they may be installed in any position, inside or outside of the fixture. Modulux valves are available in seventeen models, ranging in capacity from 3,000 to 48,000 Btu per hour.

### Nine More Reasons Why Leading Servicemen Prefer Frigidaire Modulux Valves

1. Compact, light-weight construction.
2. Non-porous, forged brass body.
3. Single bellows, hermetically sealed.
4. Gas-charged feeler bulb assures precise control.
5. Removable fine-mesh strainer on inlet side.
6. Self-aligning, stainless steel needle.
7. Non-corrosive valve seat. Needle and seat replaceable.
8. Especially recommended where automatic defrosting is desired.
9. Thoroughly factory-tested, accurately calibrated.



### Frigidaire Makes a Quality Valve For Every Refrigeration Need

Where constant refrigerant pressure is required, Frigidaire Automatic Expansion Valves are recommended. They incorporate many of the design features and advantages of Modulux Valves. Other Frigidaire Valves include High-Capacity Expansion Valves, Cooling Unit Regulating Valves and Crankcase Pressure Regulating Valves.

### FRIGIDAIRE "PARTS" CATALOG

*Free* to all

### Refrigeration Servicemen

Frigidaire service parts, now in plentiful supply, are available to all refrigeration servicemen. For your free Frigidaire "Parts" Catalog, write to: Frigidaire Division, General Motors Corporation, 1248 Amelia Street, Dayton 1, Ohio.



for draft and bottle beverage coolers...

IDEAL Speed-Freeze PRODUCTS

IDEAL COOLER CORPORATION  
2953 EASTON AVE., ST. LOUIS 6, MO.

**WILSON**  
REFRIGERATION, INC.

• FARM AND HOME FREEZERS  
• REACH-IN REFRIGERATORS  
• WALK-IN REFRIGERATORS  
• FARM MILK COOLERS

DIVISION OF WILSON CABINET CO., INC.  
MYRNA, DELAWARE

You're twice as sure with two great names

**FRIGIDAIRE**  
made only by  
**GENERAL MOTORS**

FRIGIDAIRE DIVISION  
General Motors Corporation,  
1248 Amelia Street, Dayton 1, Ohio

Please rush my free copy of your new parts catalog—"Genuine Precision-Built Frigidaire Parts and Accessories."

Name \_\_\_\_\_

Firm Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_



## INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

etc. we ship abroad to nations which participate in the ECA are outright gifts.

But that isn't quite true. At the discretion of Paul Hoffman, these shipments can be credited on the books either as gifts or loans. Whenever and wherever he finds out that the receiving nations can repay us in part for these donations, he will tag a portion of these shipments as "loans to be repaid."

For example: the Belgian Congo is rich in uranium, industrial-type diamonds, manganese, and other raw materials the United States needs for its World War III stockpiles.

Ergo, our shipments of food, fertilizer, machinery, etc., to Belgium will be traded for the promise of return shipments of those raw materials which Belgium can dig up and send to us.

Likewise, the British and the Dutch can supply us with tin, natural rubber, cinchona bark, mica, and what-not from their overseas colonies and confederates.

Hoffman will make no "paper loans." But if there's a chance that the nation which puts to use the wheat, meat, tractors, trucks, and freight cars we send them can supply us with raw materials for our World War III stockpile, loans will be arranged.

### Our Screw World

Footnote on the above:

WASHINGTON — "Tanks lend-leased to the British will be sold to Argentina by Belgium, it was learned today.

"Henri Spaak, Belgium premier, won tentative approval of the American state department for the deal.

"It is understood there are 600 tanks in the lot."

The above news item is quoted verbatim from a recent issue of the *Detroit Times*.

You figure it out, we're weary.

### Irrelevant Laughs

When Bill Knudsen was the High Priest of the 1943 "war effort," a civil servant reported, dimly, that an important report couldn't be found.

Knudsen was unimpressed. "Reports are no good," he said. "Either they tell you that something has been done, or that it can't be done. The first you don't need; the other kind you shouldn't see."

In the Phillips Brooks House at Harvard University, according to a neighbor who is a refugee from Harvard for the summer vacation, there is a small bronze plaque under the bust of old Phillips himself which reads:

"This House is Dedicated to Piety, Charity, and Hospitality."

Directly under the plaque at the end of last semester, was tacked a white card with this message prominently inscribed thereon:

"No Trespassing. Unauthorized Persons Are Not Allowed in This Building."

The following story was incorporated in an address on the Taft-Hartley Act delivered by Kendall B. DeBevoise, Esq., counsel for the National Electrical Wholesalers Association, at the latter's 40th anniversary convention in Buffalo:

An attractive English girl visited a beautifully appointed American home. She was amazed at our automatic way of life while sojourning there. Her hosts pressed buttons to cook their food, and to wash the dishes. Their clothes were washed, also, at a button's touch. Their radio, music and television entertainment were turned on and off by the same manner.

Came a day when the young son of the family took this English lassie for a drive in his convertible. It was a beautiful day; and so, with a press of a button, he lowered the top. Then, he reached under the dashboard and opened the hood ventilator.

Followed a sharp rush of air, and the girl's skirt flew over her head. As she smoothed her skirt back over her knees she complained: "I say, don't you blighters over here ever do anything by hand?"

Definition of a highbrow: "A person who enjoys something until it becomes popular."

The advertising solicitor of a small-town newspaper simply couldn't sell an advertising schedule to the town's outstanding merchant. Said merchant didn't believe in newspapers. He didn't believe in advertising. He avowed he didn't read that trash, and he was gol darn sure nobody else did.

"Now look here, Clem," entreated the advertising salesman. "If I prove to you that our paper is widely read,

will you buy some advertising space with us?"

"Well," hesitated the merchant, "if you can prove it, mebbe I will and mebbe I won't. But I don't think you can. Not in this territory, leastwise."

In the next issue of this local newspaper the following small line appeared in a remote corner of the "classified ad" section: "What is Clem Stewart going to do about it?"

Two days later a groaning and fatigued Clem Stewart dashed into the local newspaper office and threw himself into a chair beside the advertising manager's desk.

"Listen, Jones," he panted, "you got me into this mess; now it's up to you to get me out. Everybody in this town's been heckling me to find out what I'm going to do about 'IT.' I'll do anything you say, long as I can get some peace again."

Next day, in the classified ad section of this small-town newspaper, there appeared this announcement:

"Clem Stewart is going to advertise, of course."

To pave the way for his first call, they say that Mark Antony sent Cleopatra a pre-approach letter. What he wrote is not recorded. History does reveal, however, that he got the interview—and her business. Figure out your own moral.

"A man with a wonderful vocabulary is one who can describe a shapely girl without using his hands."—Wall St. Journal).

"Daddy, there's a woman peddler at the door."

"Tell him I got one too many now."

A famous national magazine recently hired a public-opinion-poll firm to "survey" its acceptance among readers, and to find out what these "sampled" characters thought about five other magazines in the same field.

The questionnaires covered acres of ground, asked all sorts of questions about what the respondents thought about each of the magazines. One reply was a classic. The respondent, in this case, gave full and complete answers in regard to five of the magazines but next to the sixth he pencilled in this arbitrary note: "Hebrews 13:8."

The researchers finally found a Bible, looked up chapter and verse, and this is what they found:

"Jesus Christ the same, yesterday, and today, and forever."

### Definitions

"A conference is a group of men who individually can do nothing, but as a group can meet and decide that nothing can be done."

"A statistician is a man who draws a mathematically precise line from an unwarranted assumption to a foregoing conclusion."

"A professor is a man whose job it is to tell students how to solve the problems of life which he himself has tried to avoid by becoming a professor."

"A consultant is a man who knows less about your business than you do and gets paid more for telling you how to run it than you could possibly make out of it even if you ran it right instead of the way he told you."

"A specialist is a man who concentrates more and more on less and less."

"An optimist thinks the future is uncertain."

"A pessimist thinks the optimist is right."

"An economist is a man who can make a simple subject complex, a complex subject simple; in other words an economist is simple simple."

These definitions are now in high favor around the industry, and dozens of men are carrying them around in wallets showing them on the slightest provocation.

Who originated them nobody seems to know, but we salute him.

Readers, knowing our intense dissatisfaction with current statisticians and statistical methods, can well imagine our high glee over that definition of a statistician. Let's read it again—it's so true:

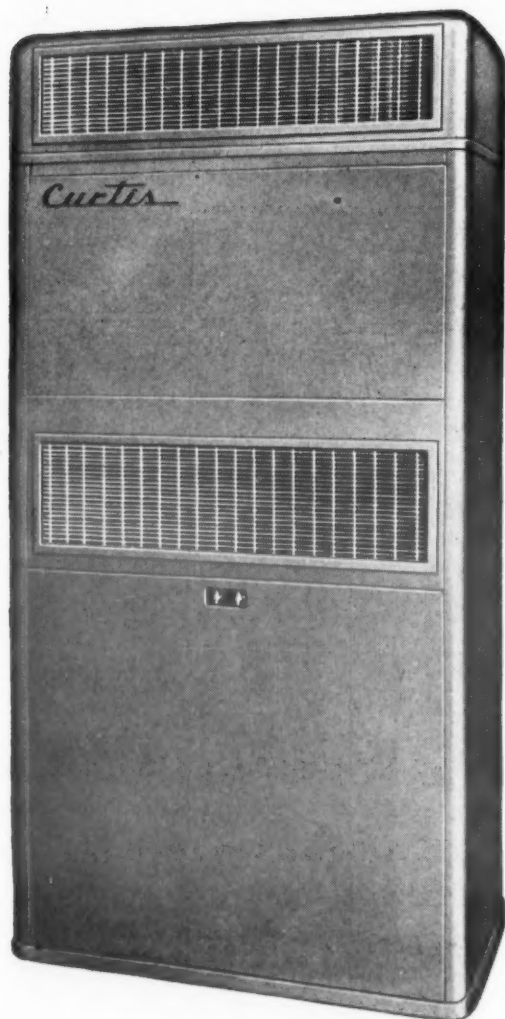
"A statistician is a man who draws a mathematically precise line from an unwarranted assumption to a foregoing conclusion."

Too often today statistics are either: (1) worthless and meaningless, or (2) manipulated to support a controversial position.

Is there a statistician in the house who wants to argue the point?

# CURTIS REFRIGERATION AND AIR CONDITIONING EQUIPMENT

... Offers More to You and Your Customers



Curtis Packaged Air Conditioner, Capacities 3, 5, 7½, 10 and 15 tons

For commercial refrigeration or air conditioning applications the complete Curtis line offers more to your customers—in satisfactory, trouble-free performance, sound, proven design and engineering and lower operating and maintenance costs. Curtis advantages include:

- Timken Bearings
- Extra large condensers
- Slow operating speed—quiet performance
- The Finest Materials—Precision Construction
- Long Life
- Full range of sizes and capacities

You'll sell more, make more profits when you sell Curtis. Write for full information today.



Curtis Condensing Units, ¼ to 30 h.p. Air and Water Cooled

# CURTIS

REFRIGERATING MACHINE DIVISION

of Curtis Manufacturing Company  
1912 Kienlen Ave. • St. Louis 20, Missouri

94 Years of Precision Manufacturing

UNIT COOLERS  
CASE COILS  
COMFORT COOLERS  
FINNED TUBING  
CATALOG ON REQUEST  
MERCHANT & EVANS CO.  
PHILA. 46, PA.

# Gloekler

Model 20 SD

- STAINLESS INTERIOR
- BAKED ENAMEL EXTERIOR
- COMBINATION ICE CUBER AND FROZEN FOOD STORAGE
- SEALED IN UNIT



Several territories still available - Write for details.

Gloekler REFRIGERATOR COMPANY  
ERIE • PENNSYLVANIA





Marilyn Elgin, billiard enthusiast, pauses for a drink at a recreational hall.

## Water Coolers Gain Wider Use In U. S. Sport Centers

CHICAGO—Modern electric water coolers have replaced the boys who used to scurry around bowling alleys and billiard parlors with pitchers of cold water for ten pin and cue fans.

Bowling alleys, health clubs, gymnasiums, billiard parlors and golf clubs everywhere are adding coolers.

Providing plenty of properly cooled water for thirsty "keggers" and billiard enthusiasts, modern water coolers are helping to make sports "palaces" both healthful and entertaining places to visit. Youths desiring to emulate the standards of champions who believe that "championship playing depends upon championship living" are encouraged to drink plenty of water.

Bensinger's in Chicago, where cue champions such as Willie Hoppe, Willie Mosconi, Charles Peterson, and others play, has a water cooler convenient to the exhibition tables. During intervals of match play the champions refresh themselves with plenty of properly cooled water.

## AIR CONDITIONING and REFRIGERATION MECHANICS and ELECTRICIANS

**Urgently Needed  
NOW  
for  
Overseas Work  
In The  
PACIFIC AREA**

... to install and repair Refrigeration Equipment. Also instruct new workers.

### TO QUALIFY:

**REFRIGERATION** mechanics must have sufficient experience and training to handle domestic equipment and industrial units up to 15 tons. Minimum practical technical background covering 3 years period.

**ELECTRICIANS** for shop work on motor rebuilding and on instruments, 3 years experience.

**APPLICANTS** must be 24 years of age or over and must pass Physical Examination.

**BASE PAY, Bonus, Living Allowance and Vacation** add up to \$7,000.00 per year.

Apply to S-46, P.O. Box 3552  
PHILADELPHIA 22, PA.

Interviews Will Be Arranged for  
Successful Applicants.

## Consumer Credit Increases

### Nearly \$220 Million In April

WASHINGTON, D. C.—Consumer credit outstanding at the end of April was 28% greater than it was at the same time last year, according to a Federal Reserve Board report.

In April alone the rise was nearly \$220 million over the month of March, bringing the total \$13,596 million.

Installment credit increased \$241 million during April, with the increase accounted for to a large extent by expansion of installment sale credit, it was reported.

## O'Neal Starts Up In Savannah

SAVANNAH, Ga. — Albert L. O'Neal has opened a household and commercial refrigeration and oil-burning heating equipment service firm here.

For the past several years O'Neal has been associated with several refrigeration and heating firms.

## Maisel Vs. Maisel Vs. Maisel

## Buffalo Dealer Sues To Prevent Rival With Same Name from Opening Next Door

BUFFALO—Maisel's, Inc., a local appliance outlet, is located at 915 Broadway.

Maisel's (Ed) Furniture & Appliance Co., is located at 911-913 Broadway.

Maisel's, Inc., doesn't think this is cricket. In fact, the firm has asked the Supreme Court to restrain Edwin Maisel from using the Maisel name within a mile area in the sale of household appliances. Maisel's, Inc., contends that Edwin's use of the Maisel name tends to divert business from its store.

One of the witnesses called by the plaintiff to prove its point was Taylor Caldwell, famous novelist. In private life her name is Mrs. Marcus Reback.

Some years ago, Mrs. Reback bought a washing machine from

Maisel's, Inc. When the machine needed repairs about a year ago, Mrs. Reback consulted the telephone book and called up a Maisel company, which repaired the washer.

Upon receiving a bill for "\$27 or \$28," Mrs. Reback testified, she called Mrs. Bella Maisel Rock, of Maisel's, Inc., for verification. She then learned, she said, that the work had been done by Edwin Maisel.

However, the latter's attorney brought out that the machine had been repaired before and that Mrs. Reback's maid, who had placed the order, had sent it to Maisel's, Inc., as intended.

(In an apparent effort to beat the name-similarity situation, Maisel's, Inc., has listed itself in four different ways in the white pages of the current telephone directory. All four

telephone numbers are the same.

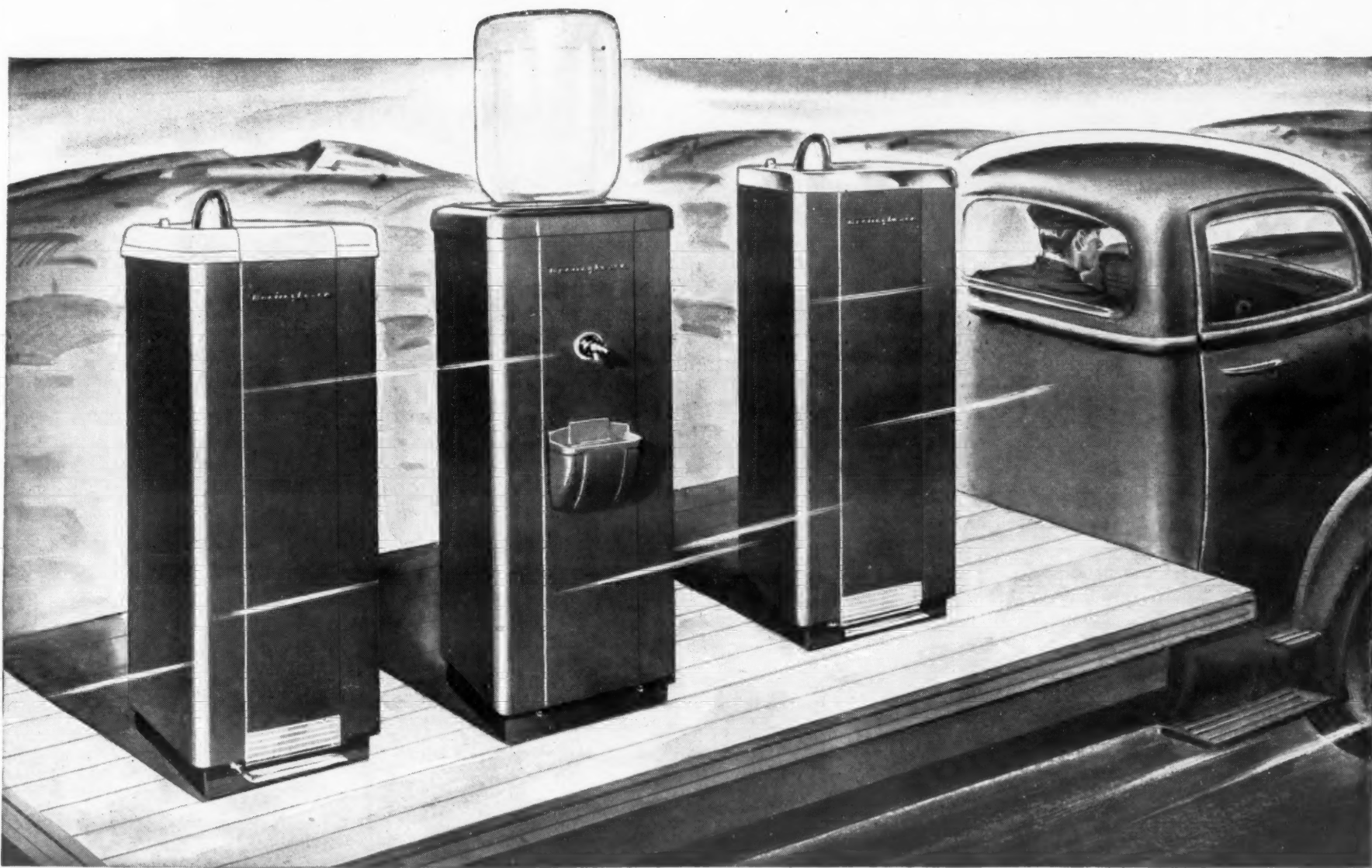
(The firm is listed first in regular, lightface type as "Maisel A—electrical appliances." A little further down the page, it shows up again as "Maisel's—radios and electrical appliances." Directly beneath, it appears in boldface type as "Maisel's A—radios, refrigerators, washers.")

Just in case you're interested, the telephone directory also lists a Maisel Furniture Co., Inc., at 703 Fillmore Ave., with a branch at 317 Washington. It, too, handles electrical appliances.

## Dallas Contractors Organize

AUSTIN, Texas—Records in the Office of the Secretary of State here show the recent incorporation in Dallas of the Air Conditioning and Refrigeration Contractors Association of Dallas. The association was chartered by R. R. Matthews, J. B. Lowe, and J. L. Cassell.

# WESTINGHOUSE WATER COOLERS ARE GOING PLACES!



## A Heavy Load of Profits for You!

Going places is right! Here's your chance to cash in on a heavy load of profits with the exciting, all-new, '48 line of Westinghouse Water Coolers.

Completely restyled and redesigned, the '48 line incorporates such new features as a Foot Pedal Operated Bubbler... Automatic, Stream Height Regulator... Stainless Steel Top... Occupies only 14" x 14" of Floor Space... Anti-Squirt Bubbler... Removable Front Panel... plus a cool, blue-grey finish and chrome trim.

### And This Plus Feature To Help You Sell

... the 5-Year Protection Plan for the entire Hermetically-Sealed Refrigeration System. This Plan consists of 3 parts:

1. Standard One-Year Warranty on the Complete Water Cooler.
2. Additional four-year FREE REPLACEMENT of the Hermetically-Sealed Mechanism. During these four years, if the Hermetically-Sealed Mechanism should fail, Westinghouse replaces it at no cost to you. The Westinghouse design principle makes this possible.

### 3. Hermetically-Sealed Mechanism Exchange Plan.

After five years, if the Westinghouse Hermetically-Sealed Mechanism should fail, Westinghouse will replace it on an equitable exchange basis. The new Hermetically-Sealed Mechanism then again carries the four-year replacement protection as stated in the second part of the plan.

A Bottle Cooler and six Pressure Coolers, seven models in all, assure you a capacity for every need.

For franchise details, check your local Westinghouse Distributor.

WESTINGHOUSE ELECTRIC CORPORATION • Electric Appliance Division • SPRINGFIELD 2, MASS.

# Westinghouse Water Coolers

WITH THE 5-YEAR PROTECTION PLAN



FOR LONGER LIFE

on your next job choose a

**MILLS**a condensing unit for  
every installation

Mills Industries, Incorporated • 4100 Fullerton Avenue • Chicago 39, Illinois

FRIENDLY • COURTEOUS • HELPFUL

**CHASE**

**ONE STOP SERVICE**

COMPLETE STOCKS — PERSONALIZED SERVICE — SATISFACTION

**CHASE REFRIGERATION SUPPLY CO.**  
546-48 W. 119th STREET • CHICAGO 28, ILL.

## Prospect Selection and Five A's of Air Conditioning Discussed at Indoor Comfort Forum for Dealers

By George M. Hanning

DETROIT—The best way to sell packaged air conditioning is to get to as many prospects as possible ahead of your competitors, tell the prospect your story, and close as many sales as possible as quickly as possible.

If you find that the prospect has already been interviewed by several other air conditioning salesmen and is collecting estimates your chances of selling him are reduced in ratio to the number of salesmen he has seen. In that case, you have just as great a chance to make money at the race track—where you would probably have a much better time.

That was the advice passed out recently to a group of local air conditioning dealers by W. Henry Knowlton, now a writer-producer for Florez, Inc., a sales promotion organization, but formerly with Chrysler Airtemp. He has been active in the air conditioning field for the past 20 years.

Knowlton spoke at the opening session of an educational Indoor Comfort Forum for dealers sponsored by Temp-Matic Wholesalers, Inc., air conditioning distributor here.

The forum will cover in weekly meetings through June and July, air conditioning, summer and winter ventilation, summer servicing of heating systems, and oil, gas, and water heating, according to A. O. Frederick, Temp-Matic sales manager.

In the first session Knowlton

enumerated various packaged air conditioning prospects and discussed how to get the prospect to buy. T. H. Mabley, chief engineer and secretary of Temp-Matic and Mechanical Heat & Cold, Inc., outlined the five A's of air conditioning and illustrated the use of the cooling load estimate form recommended by the Air Conditioning and Refrigerating Machinery Association.

### Dealer Can Pick His Prospects

Knowlton declared that the air conditioning sales situation has entirely reversed itself since the mid-thirties. Then it was difficult to find a prospect who had enough money to buy air conditioning. Now everyone has money, especially those persons who are the most likely prospects.

Today, the air conditioning dealer can afford to be selective in his choice of prospects. His best bets, Knowlton asserted, are automobile dealers, bars, doctors and dentists offices and clinics, industrial offices, drug stores, florists and furriers, funeral homes, supermarkets, homes, milliners, and photographic studios.

Not so good, in his view, are beauty shops, barber shops, candy stores, and lawyers offices.

The first three, he claimed, are usually marginal operations. There are good prospects among them, but the air conditioning dealer needs to be very careful about the operator's credit before he wastes much time with him.

Knowlton related that when he was an air conditioning salesman he made some 1,000 surveys in a month for small operators like these and only closed three sales.

From that, he said, he learned that when the prospect asks what an installation will cost, not to start making a survey, but rather give him a flat working figure.

"If you tell a candy store operator that air conditioning will cost him about \$5,000 roughly and you don't have to get a glass of water to bring him out of his faint, then it is probably safe to go ahead with a survey," he declared.

Knowlton admitted that lawyers should make good prospects for air conditioning, but for some reason, for him at least, they have been very hard to sell. "They are smart fellows and can think up more reasons why they shouldn't buy than you can for why they should, I guess."

Knowlton advocated what he called "low pressure high pressure" selling.

"A sales manager once told me," he related, "that if you know the prospect's name, you are not going in cold turkey. And the prospect's name is not hard to discover."

"When you call on the prospect, you will probably be met by a re-

ceptionist, part of whose job is to keep you from seeing the boss. So tell her anything to get by her. Don't tell her you are there selling air conditioning. Tell her you had met the boss at a recent convention or something and wanted to see him again.

"Then when you do get to see him, don't beat around the bush. Present your story and show him you wish to waste neither his time nor your own."

"And don't do all the talking. Ask questions. Find out about his background—what church he belongs to, where he lives, what clubs he is a member of, where he has been. Sooner or later you are going to turn up something that will put you on common ground."

"When you get on common ground, then you are a long way toward getting the prospect to like you. And that is important in closing sales."

### Mabley Cites Five A's

Mabley outlined for the group the five A's of air conditioning. These are:

1. Air temperature
2. Air humidity
3. Air cleanliness
4. Air ventilation
5. Air circulation.

He noted that air conditioning attempts to keep the temperature of the space to be conditioned within the human comfort zone. This ranges from 68° to 80°, depending on outside conditions. In winter, for instance, the human body is more comfortable at about 70° and in summer closer to 80°. That is, in the temperature zones found in the northern part of the United States.

Pointing out that relative humidity is the amount of moisture that the air can hold at a certain temperature, Mabley likened the air to a sponge. At warmer temperatures it can hold more water than it can at colder temperatures, he said. For instance, the air at 60° F. in the morning might have a relative humidity of 85%, while at 95° in the afternoon, with the same amount of moisture present, it would have a relative humidity of 45%.

It is desirable, he said, to keep relative humidity in summer at 50% at 80° F. and in winter between 20 and 30% for human comfort.

Ventilation for comfort, he noted, ranges from a minimum of 4 c.f.m. to a maximum of 30 c.f.m. The latter figure, he said, would be needed to clear a smoky room.

Air circulating at 50 ft. per minute marks the beginning of a draft. In a humid climate such as exists in Michigan, air moving at 300 ft. per minute, will produce cooling no matter what the temperature. That is why attic fans work so successfully here, he declared.

## New Idea for dust removal made practical... VAIRIFIED AIR IMPELLERS

cut horsepower requirements 60%...unit size reduced  
over 50%...production costs lowered substantially

A manufacturer developed a new type of unit for automatically removing harmful dust which accumulated during an important manufacturing process. The unit did the intended work successfully, but it was entirely too bulky, much too noisy and the cost of production was excessive.

Again Torrington engineers were able to render valuable assistance because of their years of experience in working with the problems of air impelling. A Vairified Airotor blower wheel and unit design im-

provements were recommended. The unit still delivers the same air volume, but it is now made at considerably lower cost; 60% less horsepower is required for its operation; size is reduced over 50%. The noise problem is eliminated.

This and many other similar problems have proved that Torrington's engineers can be of the most help while a product is in the early stages of design. May we help you?

Sales engineers in all principal cities



THE **TORRINGTON**  
MANUFACTURING COMPANY, TORRINGTON, CONNECTICUT

## The NAT PACKAGED

Self Contained  
**AIR CONDITIONER**

EASY TO INSTALL — ECONOMICAL IN UPKEEP

The Nat Air-conditioning Unit is so constructed as to be easily serviced.

*The Answer to the Service-Man's Prayer*

All working parts are accessible without having to tear down the cabinet.

The NAT comes in 3 sizes:  
3.3, 4.2 and 5.4 Tons

The LAST WORD in  
Appearance and Performance

Sold through exclusive dealers and distributors  
some territory still open — inquiries invited

**The NAT Corporation**

2710 McGee Trafficway • Phone HA. 1892 • KANSAS CITY, MISSOURI  
The Nat Corporation also manufactures the NAT Suspended Gas-Fired Unit Heater



## Cheyenne Dealers Warn Individuals and Clubs Not To Sell Appliances

CHEYENNE, Wyo.—Individuals or clubs who peddle electrical appliances door-to-door or solicit sales by telephone here are violating a local ordinance and are subject to prosecution, local dealers warned through the press recently.

Cheyenne citizens were urged to report such violations to the chamber of commerce.

The warning read, in part: "The business men of Cheyenne who pay taxes and all other expenses of doing business and endeavor to furnish the best in merchandise and service to the people of the city, vigorously protest against the practice of soliciting and selling merchandise by individuals or clubs, who pay no taxes, carry no inventories, maintain no place of business, and assume no responsibilities.

"There is a Green River ordinance prohibiting such practices to protect the legitimate business people and they desire the ordinance enforced.

"Under this ordinance, it is unlawful to solicit or sell merchandise by individual persons, clubs, or associations from house-to-house, store-to-store, or in office buildings.

"Merchandise such as . . . electrical appliances, etc., is being peddled from door-to-door and by telephone in violation of this ordinance.

"Notice is hereby given that any person or persons violating this city's Green River ordinance will be prosecuted under the terms of the ordinance."

## Knoxville Appliance Sales Nearly Double In April

KNOXVILLE, Tenn. — Knoxville appliance dealers rang up more than twice as many sales on most major appliances during April than they did in March, the Knoxville Utilities Board has reported. Sales increases on the remainder were not far behind.

Home freezer sales led the way with a sky-rocketing gain of 483%. Twelve units were sold in March and 70 in April.

Electric water heater sales jumped up 117%. Washing machines moved up 105% and ironers 100%.

Refrigerator sales advanced 81% and electric ranges 77%.

Only declines noted were in waste disposal units (down 28%) and dishwashers (down 52%). These two appliances, however, form a very small part of the whole picture.

Unit and dollar volume for April as reported by the utilities board are:

Appliance	No. of Units	Value
Home Freezers . . . . .	70	\$ 21,638
Refrigerators . . . . .	798	212,279
Ranges . . . . .	483	113,955
Water Heaters . . . . .	217	27,138
Dishwashers . . . . .	10	2,684
Waste Disposal Units. . . . .	5	700
Washing Machines . . . . .	631	93,492
Ironers . . . . .	44	6,117

## Deepfreeze District Sales Mgr.

ATLANTA—James Reynolds Carey has been appointed district sales manager of the Atlanta district for Deepfreeze Division, Motor Products Corp. He was formerly associated with a distributor in Tennessee.

## Factory Sales of Washers Up 34% for 4 Months

CHICAGO—A rise of 34% in factory sales of standard-size household washers for the first four months of 1948 over the same period of 1947 has been reported by the American Washer and Ironer Manufacturers' Association.

Total sales for the first four months of this year were given as 1,510,432 units, compared to 1,126,210 for the same 1947 period. The association noted that the 1948 figure represented 74.6% of the industry's sales for the entire year in 1946.

Sales for April, 1948 were 22% above sales for the same month of 1947, association figures indicated. Total for April, 1948 was 393,660 units against 320,969 for the 1947 month.

Ironer sales for the first four months of this year were given as 192,848, or an increase of 16% over the 164,599 units sold during the same period last year, according to the association figures.

## Nebraska Declines To Rule On Personal Property Issue

LINCOLN, Neb.—The state attorney general's office has given the opinion that it is up to the individual city or county to decide whether refrigeration systems and individual refrigerators and gas stoves are fixtures or personal property. This decision was given by Assistant Attorney General Leslie Boslaugh to Douglas County Attorney James J. Fitzgerald at Omaha.

The Douglas county official had requested an opinion on his own opinion that multiple unit refrigeration systems in apartment houses should be considered fixtures and part of the realty, while plug-in refrigerators and individually connected gas stoves should be considered personal property.

Boslaugh quoted Judge Bayard H. Paine of the Nebraska Supreme Court as saying that "each particular case of fixtures must be determined by its own facts and is more for the jury than for the court."

## Distributor's Video Show In the Making



Above is a rehearsal of the "Commercial" portion of one of the Video shows sponsored by Harry Alter Co., Inc., distributor of Crosley products in Chicago. These skits are woven into the televised wrestling program during the eight-minute main intermission. Other commercials are used before and between the bouts. Max Geisler, sales manager, reports that many sales are made as a direct result of the television show by Crosley dealers who remain open on these nights.

*If the customer is in a hard-to-please mood...*



**POINT TO THE DU PONT SEAL**



**It identifies America's leading home appliance finish!**

The "Dulux" seal's a sure-fire clincher for your quality-finishes story. You'll find an increasing number of prospects who have learned to have complete confidence in the name "Du Pont Dulux." From past experience, they know the seal promises a superlative appliance finish that gives years of service . . . rigidly pre-tested for color retention, washability, and mar resistance. So use the seal to close the deal!

If your manufacturer supplies you "Dulux"-finished appliances without the seal, ask him to include it hereafter. It helps your prospect make up her mind . . . means more sales for you!

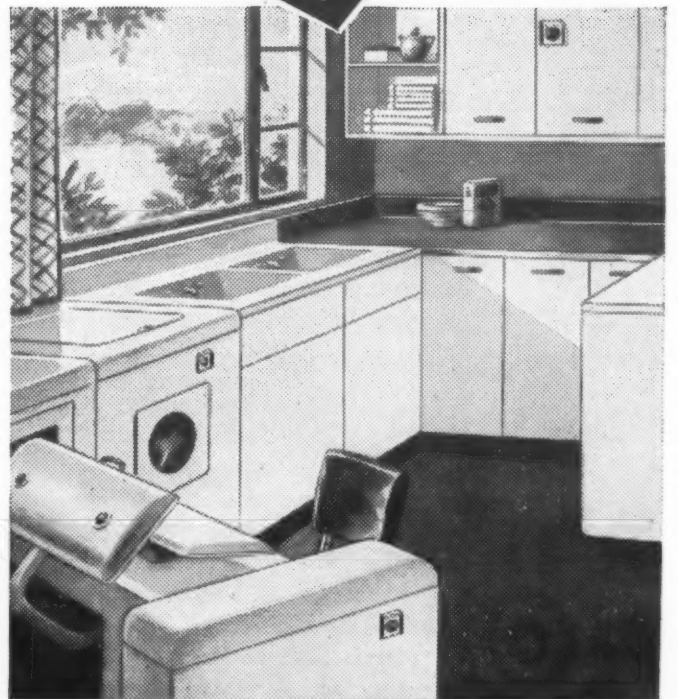
E. I. du Pont de Nemours & Co. (Inc.), Finishes Division, Wilmington 98, Delaware.



BETTER THINGS FOR BETTER LIVING  
...THROUGH CHEMISTRY

**DULUX**

REG. U. S. PAT. OFF.



**recommended for painted or enameled surfaces...**

*Jarrow...*  
Refrigerator Door Gaskets Are Again Made From Crude Rubber

Always Demand These Quality Gaskets

**JARROW PRODUCTS**

420 N. LA SALLE ST., CHICAGO 10, ILLINOIS



## • SURPLUS COMPRESSORS

Due to overstock, we are offering, subject to prior sale, a sizeable number of NEW Universal Cooler compressors with motors in the following models:

A14FN . . . . .	\$ 55
DD33FLI . . . . .	\$ 79
DD50FLI . . . . .	\$ 96
W50FS . . . . .	\$130

All prices include motors.  
All prices FOB Denver.  
Write, wire or call

**The GRAUMAN Company**  
12th & Lawrence Sts., Denver, Colo.

## Electromatic

Valves, Driers, Strainers,  
Charging Lines, Quick Couplers,  
Forged Flare Nuts and Fittings

Ask Your Wholesaler

## Electromatic

2100 Indiana Ave. • Chicago 16, Illinois  
Canada — 2025 Addington Ave., Montreal

## M-H Promotes Five To Sales Exec Posts

MINNEAPOLIS—Five promotions involving regional, branch, and division managers have been announced by the Minneapolis-Honeywell Regulator Co. The moves were made necessary because of expanding sales and service activities in various sections of the country, according to Thomas McDonald, vice president.

Kent L. Wilson has been promoted to manager of the southwest region with headquarters in Dallas. He had been Detroit branch manager.

The southwest region, which he now heads, covers all of Texas and surrounding areas and includes branch offices in Dallas, Houston, New Orleans, and Wichita.

Wilson follows Karl W. Schick who has resigned from the company to take over the agency of the Bryant Heater Co. in Dallas.

Succeeding Wilson in Detroit is T. S. Carley, formerly sales manager of the stoker and wholesale divisions at the home office.

Walter J. Baak, who has been Moduflow sales manager of the mid-western region, with headquarters in Chicago, has been promoted to sales manager of the wholesale division.

G. M. Kingsland, who has been heading sales activities of the company's control devices and specialties departments, is taking over similar duties in the heating controls division.

William S. Robards has been appointed Milwaukee branch manager. He succeeds L. C. Johnson who died in May after a short illness.

## Telling Management

## York-Shipley Consultation With Its Distributors Is Proving Beneficial

YORK, Pa.—York-Heat distributors are being consulted in determining policies which affect their operation, S. H. Shipley, president of York-Shipley, Inc., manufacturer of York-Heat automatic heating equipment, told a group of 35 distributors at a luncheon recently in Chicago.

Three committees have been set up to consult with York-Heat executives on key problems. These committees are on management, merchandising, and design. Eight distributors serve on each committee. Residential distributors' committee chairmen are Harold E. Sweeney, Philadelphia, management; A. O. Fredrick, Detroit, merchandising; and W. G. Lathrop, Hartford, design. Similar committees represent industrial equipment distributors.

The program was inaugurated last fall with the inaugural meeting in York. Plans call for at least two meetings of each committee this year.

"Our distributors are a key to our successful operation," Shipley stated. "Our factory personnel has profited greatly from the meetings held to date, and we feel that this program will be very helpful to us."

The organization of the distributor groups is a further step in the Multiple Management plan which York-Shipley inaugurated for all employees last fall.

## Talking Over 'Freon' Situation



With the return of warm weather, the "Freon" situation is back with the industry again. But, somewhat in contrast to previous year, "Tommy" Thompson, national sales manager for Kinetic Chemicals (left), amicably discusses the status of "Freon" supply with Ed Wright, president; Warren Farr, past president; and Hal Wheeler, vice president of the National Association of Refrigeration Contractors (l. to r.). Thompson assured them that Kinetic will provide sufficient "Freon" for the industry's needs if enough small cylinders are obtained to keep shipments rolling.

## Abilene Distributor Gets New Dwellings Provide Worthington Franchise Big Hot Water Market

ABILENE, Tex.—Montgomery Refrigerating Co. of Abilene has been awarded the franchise for the distribution in west Texas of products of Worthington Pump & Machinery Corp., W. J. Montgomery, general manager, has announced.

Air conditioning and commercial refrigeration equipment will be handled by the firm, with products ranging in size from residence-type air conditioning units to large commercial refrigeration units.

Montgomery, who has had 20 years experience in the lines featured by his concern, was connected with the American-Arabian Oil Co. in Saudi Arabia, working in air conditioning, for a time during the war. He was also with the Corps of Engineers, U. S. Army in the Middle East and the Philippines for several years.

### New Outlet In Buffalo

BUFFALO—A business name has been filed in the Erie County clerk's office for University Electric, 371 Winspear, Buffalo, by Stanley Slepinski.

SAVANNAH, Ga.—Outlining the 1948 new market potential for the hot water and steam heating industry, V. W. Blackney, assistant general manager of sales, United States Radiator Corp., said that approximately 30.8% of new residential dwellings built during this year will have hot water systems, while 19.9% will have steam heating installations.

These figures, resulting from a national poll by a reliable source, mean that 50.7% of this year's new dwellings are a definite market for the industry, Blackney told members of the Southern Wholesalers Association.

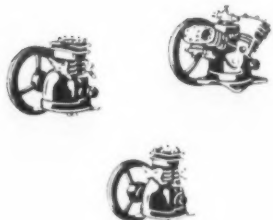
### Foster & Decker Incorporates In Binghamton with \$10,000

BINGHAMTON, N. Y.—Foster & Decker, Inc., 43 Mill St., dealer in refrigeration equipment, has been incorporated with capital of \$10,000. Incorporators are T. Harold Foster, John G. Decker, and Murray I. Dann.



Triple inspection and careful selective fitting of all parts is standard procedure at Tecumseh's high speed production plant. Above, rigid crankcase inspection holds cylinder bore to .0002" (two ten-thousandths of an inch) round and taper.

## Now! Famous Chieftain Single, Twin and 4 Cylinder Compressors Ready for Immediate Shipment!



Bottlenecks have been broken, material shortages licked . . . and, now again at last, genuine Chieftain Compressors are being produced in sufficient volume to assure immediate shipments . . . in unrestricted quantities . . . for all replacement installations as well as for assembly by manufacturers into their own products and equipment.

Chieftain, you know, has consistently set the quality pace for the industry . . . has pioneered such important advances in compressor design and manufacture as mass precision machining methods, forced feed lubrication for reciprocating parts, automatic cylinder lubrication, "Chieftainizing" connecting rods to prevent scoring, plus many, many others. And these are only a few of the reasons why smooth, quiet, dependable Chieftain Compressors have become the standard of the industry . . . a few of the good basic reasons, too, why it pays to insist on genuine Chieftain Compressors for new equipment and all replacement installations.

**TECUMSEH PRODUCTS COMPANY**  
Tecumseh, Michigan



WORLD'S LARGEST INDEPENDENT PRODUCER OF COMPRESSORS AND CONDENSING UNITS FOR THE REFRIGERATION INDUSTRY

## Styled TO MEET TO-DAYS NEEDS...



MODEL 10-SCSU

### A SMALL CASE WITH A LARGE "SALES POTENTIAL"

- 10 cubic ft. freezer • May be used as a milk cooler • Self-contained with 1/4 H P open-type unit ready to plug in • 4 wall refrigeration • One piece stainless steel top • With and without superstructure • Immediate Delivery.



**COLDIN CABINET CO., Inc.**  
2800 Webster Avenue, Bronx 58, N. Y. Tel. SEdgwick 3-5833



# EXCLUSIVE, BUT NOT HIGH-HAT

## only Jordon makes the **JORDON 10/4**

### —but a score of markets use it!

#### HIGHLIGHT FEATURES

★ **10 CU. FT. NORMAL REFRIGERATION.**  
Room for approximately 350 lbs. of fresh or cooked foods.

★ **4 CU. FT. FREEZER-LOCKER.**  
Room for approximately 140 lbs. of frozen foods, bulk ice cream, etc.

★ **12 LBS. ICE MAKING CAPACITY.**  
6 trays, 84 cubes. Fast freezing.

★ **ONE CONDENSING UNIT.**  
1/4 H.P. Hermetic. ONE simple temperature control. 5-year warranty available.

★ **HIGH POLISH STAINLESS STEEL**  
Interior. Hi-Baked white enamel exterior on Bonderized all-welded steel.

★ **DIMENSIONS:** Only 68" High. 29" Deep. 39" Wide over-all.

#### GENERAL SALES FEATURES

**SPACE SAVER:** The Jordon 10/4 does the work of 2 large units—refrigerator plus separate freezer. Note small over-all dimensions.

**ECONOMY:** One condensing unit versus 2 units. Saves electric costs.

**STYLING:** Design, finish, details are thoroughly modern. Only the finest and most durable materials are used.



*The New*  
**JORDON 10/4**  
2-TEMPERATURE  
REFRIGERATOR

#### Sold in Volume By—

- ✓ Commercial Refrigeration Dealers
- ✓ Household Refrigeration Dealers
- ✓ Electrical Supply Houses
- ✓ Appliance Dealers
- ✓ Department Stores
- ✓ Furniture Stores
- ✓ Lumber and Building Supply Dealers
- ✓ Farm Implement Dealers

#### And Purchased By—

- ✓ Large City Homes
- ✓ Large Suburban Homes and Country Estates
- ✓ Farm Homes
- ✓ Boarding Houses
- ✓ Clubs and Fraternities
- ✓ Lunch-rooms—Factory Cafeterias—Canteens
- ✓ Institutions—Hospitals

#### Making Sales Records



**THE JORDONETTE**  
3½ Cu. Ft. Refrigerator  
with Porcelain Work-table Top

For kitchenettes, studios, recreation rooms, professional offices, field offices, trailers, under-counter use.

#### A COMPLETE REFRIGERATOR

**SERVES  
A DUAL  
PURPOSE**



- ★ 34½" High
- ★ 24½" Wide
- ★ 25½" Deep
- ★ 2 Ice Trays
- ★ Interior Light
- ★ Fibreglas Insulation
- ★ All-welded Steel. Bonderized. WHITE PORCELAIN Interior. White Baked Enamel Exterior. PORCELAIN WORK TOP.
- ★ 1/8 H.P. HERMETIC.
- ★ 5-Yr. Warranty Available.

## The JORDON Commercial Line is now in full swing

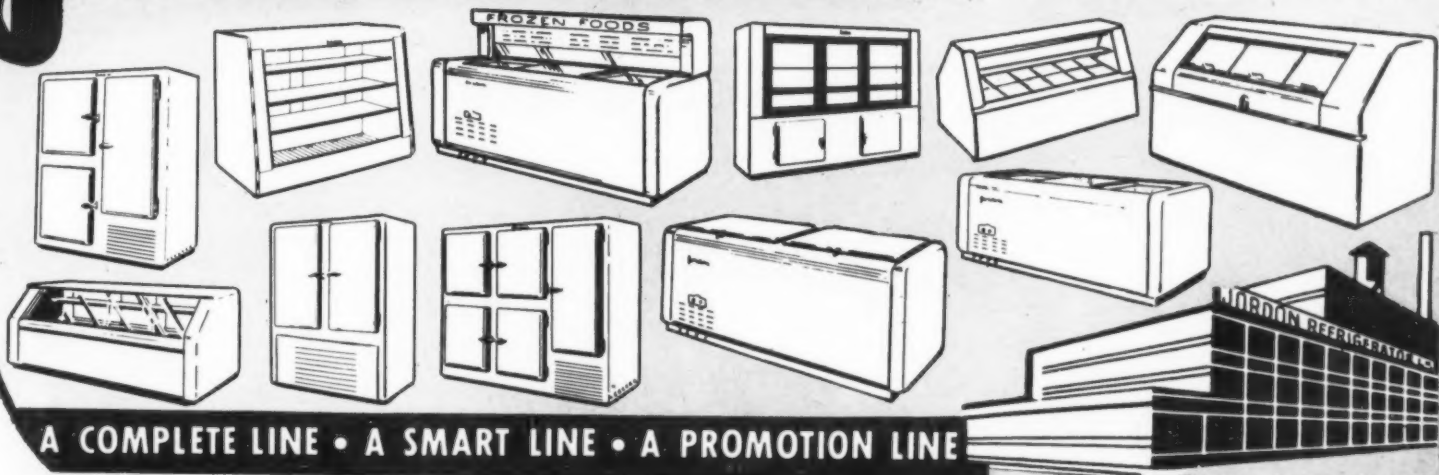
The 1948 JORDON line includes commercial and household models that give a broad coverage in all markets with unlimited and continuous profit-making opportunities. Included are:

**COMMERCIAL REACH-INS:** 23 and 37 cu. ft. sizes with ice-makers or blower coils, white and stainless steel models. **FROZEN FOOD MERCHANTS:** With optional super-structure. **DISPLAY CASES:** From 4 ft., including Full Vision Cases and Double-Duty Cases. **HOME and FARM FREEZERS.** **DRY BEVERAGE COOLERS.**

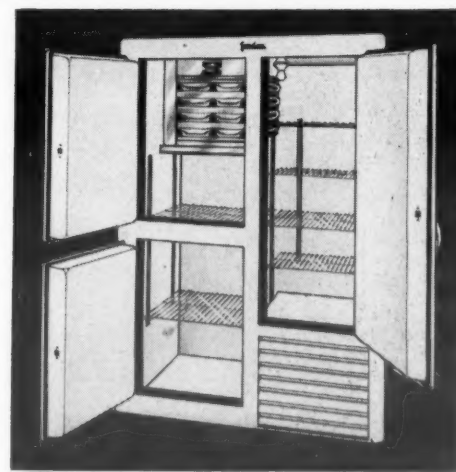
Illustrated: JORDON Model SC37 Reach-In. White Hi-Baked Enamel finish. Stainless Steel interior. Available with heavy duty ice-maker or blower-coil.

WRITE FOR LATEST CATALOG

**Jordon**  
AMERICA'S MODERN COMPLETE LINE



A COMPLETE LINE • A SMART LINE • A PROMOTION LINE



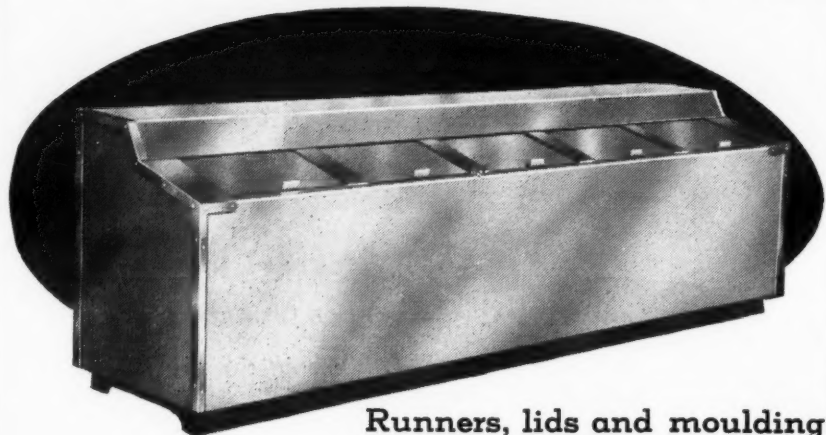
**JORDON REFRIGERATOR CO.**  
Factory and Sales Division  
58th St. and Grays Avenue  
Philadelphia 43, Pa.  
CABLE: "JORDONREF"  
BEIgrade 6-4510



# ROGERS Dry Beverage Cooler

**With disappearing lids**

Allowing every section to be used simultaneously.



Runners, lids and moulding of stainless steel

39" high; 30" wide; 4, 6, 8, or 10' long.

Write for catalogue showing this quality line of refrigeration.

Immediate Delivery!

DEALERS WANTED

Write, wire or phone today for information on franchise.

W. ALLEN

**ROGERS**

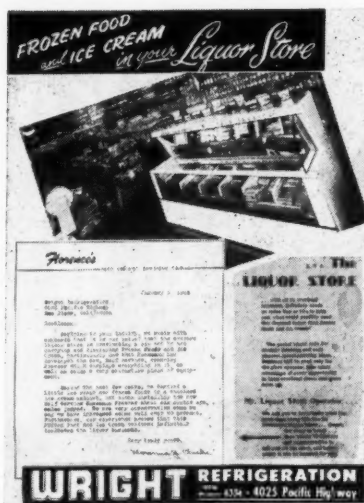
Industries

BOX 272-AC

DEMOPOLIS, ALA.

## Commercial Dealer Reaches Wide Audience By Running Newspaper 'Testimonial' Ads

R. A. Wright, dealer, figures that "everybody reads the newspaper." So to attract sales from the vast range of commercial prospects, he frequently inserts advertisements similar to those at right. Whether it's a gro-



cery store, butcher shop, or liquor dealer, Wright uses the layout to show how they've benefited from the installation of refrigeration. In this manner he brings in sales he might otherwise have missed.

SAN DIEGO, Calif.—For most commercial refrigeration concerns, advertising means direct-mail pieces distributed to a selected list of prospects. Newspapers are seldom if ever used as a medium, both because of the relatively high cost and probability that the desired audience will not be reached.

Valid as these arguments may be, R. A. Wright of Wright Refrigeration here, is proving that they represent only one side of the picture. He's been in the business for 11 years in San Diego, before that for 23 years in Pittsburgh, and has

always operated on the principle that newspaper advertising pays good dividends.

His main emphasis was on direct mail while in Pittsburgh and when he first arrived in southern California. But close observation of the comparative returns on his advertising dollar convinced him that for his locality, at least, newspaper display advertisements were a much better investment.

### Rings the Cash Register

He doesn't advocate that commercial dealers in all sections of the country follow his lead although he can vouch for the fact that a clever newspaper campaign keeps the cash register ringing at a merry clip.

His policies have been tailored to fit his community. He would spend more money with the newspapers in some localities and less in others.

The determining factor is how old and well established the business concerns in a city are. During and following the war, large groups of people were dislocated and made new homes for themselves.

This meant that many communities were supplied air conditioning and refrigeration equipment by men who were comparative newcomers. Their customers were also new, and a really good list for direct-mail sampling was either unavailable or unreliable.

Although California mushroomed with new businesses during the war, for a number of years the turnover has been considerably higher than

the national average. This fact is largely attributable to the large number of retired people who elect to spend their declining years there.

Usually, of course, they forget their vows to take life easy and end up by investing their insurance money in a small store or shop. The first thing they want to do is fix it up, and that's where Wright steps into the picture.

He sells a great many soda fountains, for instance, but he would miss a good portion of his sales if only druggists and lunch counter operators knew he was ready to serve them. By keeping his name before the public at large, he's able to draw in not only the old-timers but also the newcomers.

Although he hits the papers regularly with institutional type advertisements, those announcing specials and new shipments, the ones that really pay off carry testimonials from satisfied customers.

### 3 Elements In Layout

This is sound selling technique, Wright believes, the same that sells millions of cigarettes for the big tobacco companies every year. The layout and copy vary considerably, but there are three elements which go into each.

First, there's a cut of the proprietor shown standing near the equipment he purchased from Wright's Refrigeration. Top-flight commercial photographs are used for this purpose, so the meat or produce case

(Concluded on next page)

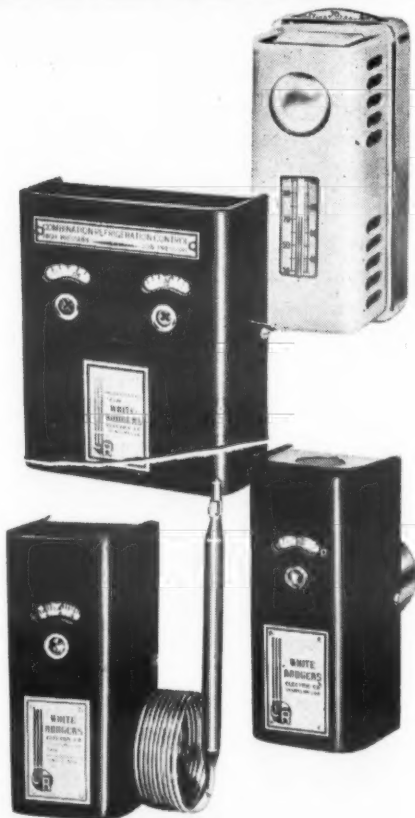
## Your refrigerating equipment IS EASIER TO SELL-

### ... when equipped with WHITE-RODGERS Controls

Years of user satisfaction have proved that the extra quality of White-Rodgers controls is your assurance of dependable performance of your refrigerating equipment.

The accuracy and rapid response of White-Rodgers controls to refrigerating requirements is possible only with the Hydraulic-Action principle. Flush mounting of White-Rodgers controls takes less space, makes for neater equipment. The wide range of White-Rodgers refrigeration controls means less inventory, increases turnover.

Let a White-Rodgers application engineer survey your requirements and submit quotation and delivery estimate. White-Rodgers Electric Company, Saint Louis 6, Missouri.



**WHITE-RODGERS**

*Controls*

FOR REFRIGERATION  
HEATING AND  
AIR CONDITIONING



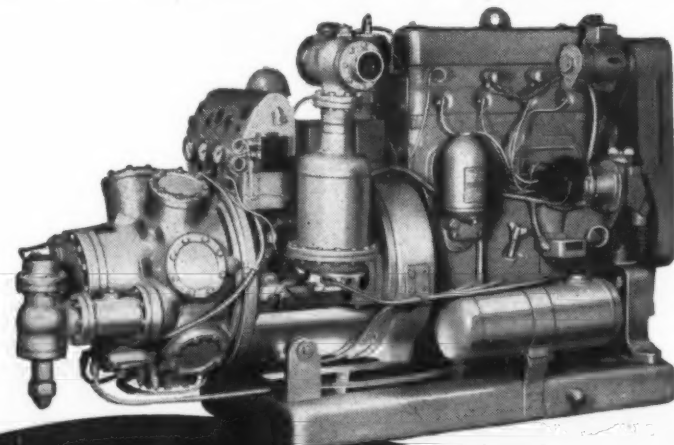
Complete, convenient, informative new refrigeration control catalogs now are available. If you haven't received your copy, send for it today.

## Lowest Cost Air Conditioning!

WITH NATURAL GAS, BUTANE,  
GASOLINE OR DIESEL POWERED

## READY-POWER ENGINE REFRIGERATION

Here is dependable, automatic air conditioning at the lowest possible cost! These units are powered by International engines and operate on fuels that are inexpensive and plentiful. Ideal for situations where power is inadequate. Write The Ready-Power Co.



THE READY-POWER CO. 11233 FREUD AVE., DETROIT 14, MICH.



## Wright's Customers 'Jump' at Chance To Benefit by Publicity from Testimonials

(Concluded from preceding page)

will show off to the best possible advantage and the client will not be embarrassed by a poor likeness. The picture is most important, since it catches a reader's eye and sends him into the rest of the message.

The real selling punch comes in the reproduction of a letter telling about use of the equipment, always written on the letterhead of the customer and signed by him.

Take the case of the grocer who cut spoilage losses from 7% to a fraction of 1% through a new refrigerated produce case. Every competitor who reads that testimonial over the grocer's signature will want to follow suit.

For added eye appeal, the cut and letter are usually placed at an angle with the bottom of the page. Sometimes two or three pictures will be staggered to attract attention. The final part of the advertisement consists of the Wright name and an invitation to let the company perform a like service for all interested.

### No Cost, Little Trouble

There's no cost and very little trouble involved in getting the letters to go with these displays. Most businessmen will jump at the chance to obtain free advertising, and Wright can practically make out his own ticket in drawing up the letter. Once the campaign was started, there were any number of customers anxious to be featured in a similar fashion.

One liquor store proprietor reported that his business took a big jump after his testimonial appeared. For several days both friends and strangers dropped in to remark about it and purchase something on the way out.

It's not possible for Wright to segregate sales he makes as a result of the newspaper advertisements, but he can tell closely enough to plan to continue them.

Wright composes most of his own copy and does a large part of the layout work. Advertisements are placed through an agency, but the peculiarities of this sort of commercial advertising in a consumer publication are a little off the beaten track. Consequently, Wright keeps his hand in at all times to make sure they're in the form he wants.

Wright's advertising expenditures run 2% of his total volume, by far the largest portion going for newspaper space. "Practically everybody reads the newspaper," he points out. "Some may only wish to see the funnies, others the sports page."

"I do very little direct-mail advertising now because I've found that I can reach so many more through a daily publication. Many members of the industry think I'm throwing money away, but I'm satisfied this technique would work in many communities."

His consumer-type appeal also car-

ries over into the physical layout of his plant. Far from being stuck off on a side street, Wright's 100-ft. by 100-ft. building, featuring lavish use of plate glass windows along the sidewalk, would do credit to any furniture store.

Window displays are sectionalized and feature complete equipment for a grocery store, soda fountain, etc. On an adjacent lot there is a new 100-ft. by 100-ft. building under construction which will be devoted entirely to showroom and have 52 ft. of plate glass running around the corner window.

## Walter Handles Liquid Carbonic Corp. Finance

CHICAGO—Allan W. Walter has been named financial vice president; Ford SeBastian, ice cream cabinet department manager; and Walter Ermer, regional cabinet sales supervisor in a series of appointments announced by Liquid Carbonic Corp.

Walter, who will headquarter here, comes to Liquid Carbonic from Magnavox Corp. where he was a consultant.

Before joining Liquid Carbonic, SeBastian was in business for himself.

From headquarters in New York City Ermer will supervise cabinet sales in Liquid Carbonic's eastern region.

## Store Drains Surplus Water By Sinking Its Own Well

LINCOLN, Neb.—Beechner's Super Market at 27th and "O" Sts., which is installing an air conditioning system that will require more water than the city water department will allow to flow into the sanitary sewer serving the property, is solving the problem by digging a well. The well will serve to carry off water from the system.

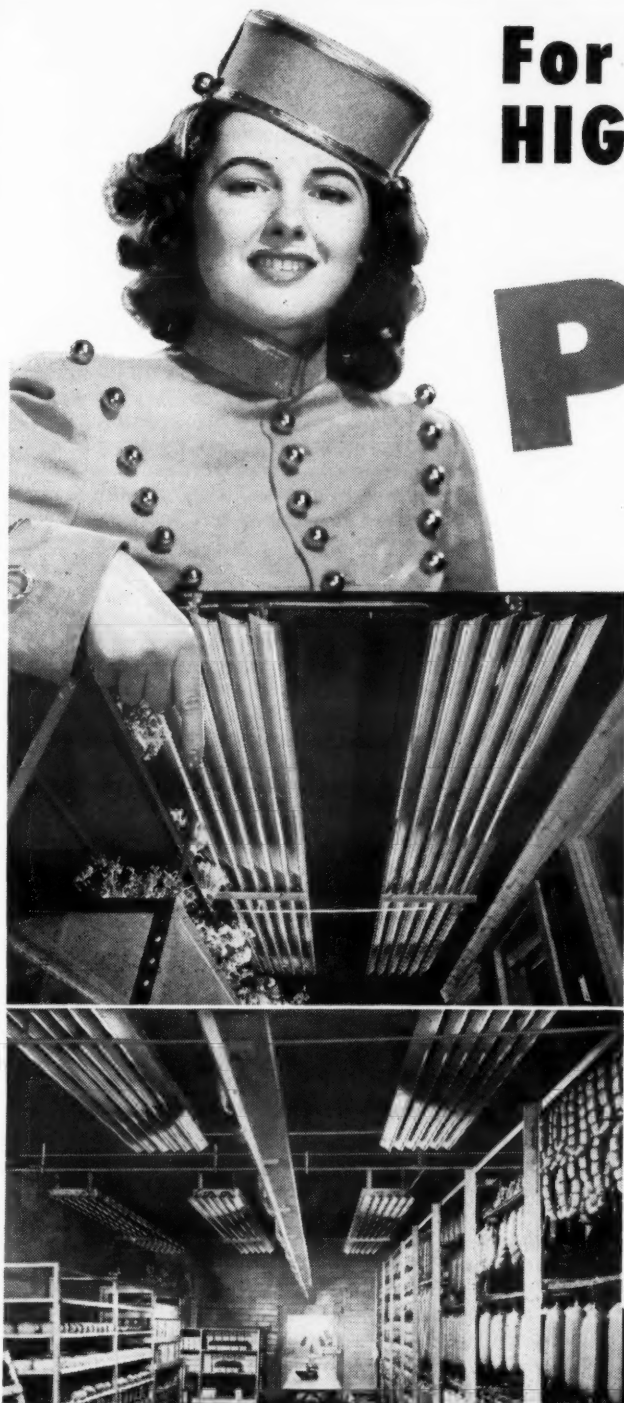
## Bevco Moves to New Quarters

ST. LOUIS—Bevco Co., manufacturer and distributor of refrigeration equipment here, has announced that it is now in its new quarters at 3110 N. 11th St.

## Wilson Names Calmes Agent In 3-State Area

HOUSTON, Tex.—Appointment of Dallas L. Calmes of 2010 North Blvd., Houston, as factory sales representative for Wilson Refrigeration, Inc., for Texas, Arkansas, and Louisiana has been announced by A. A. Davis, vice president and general sales manager.

Calmes has represented electrical appliance and equipment manufacturers in this area for many years.

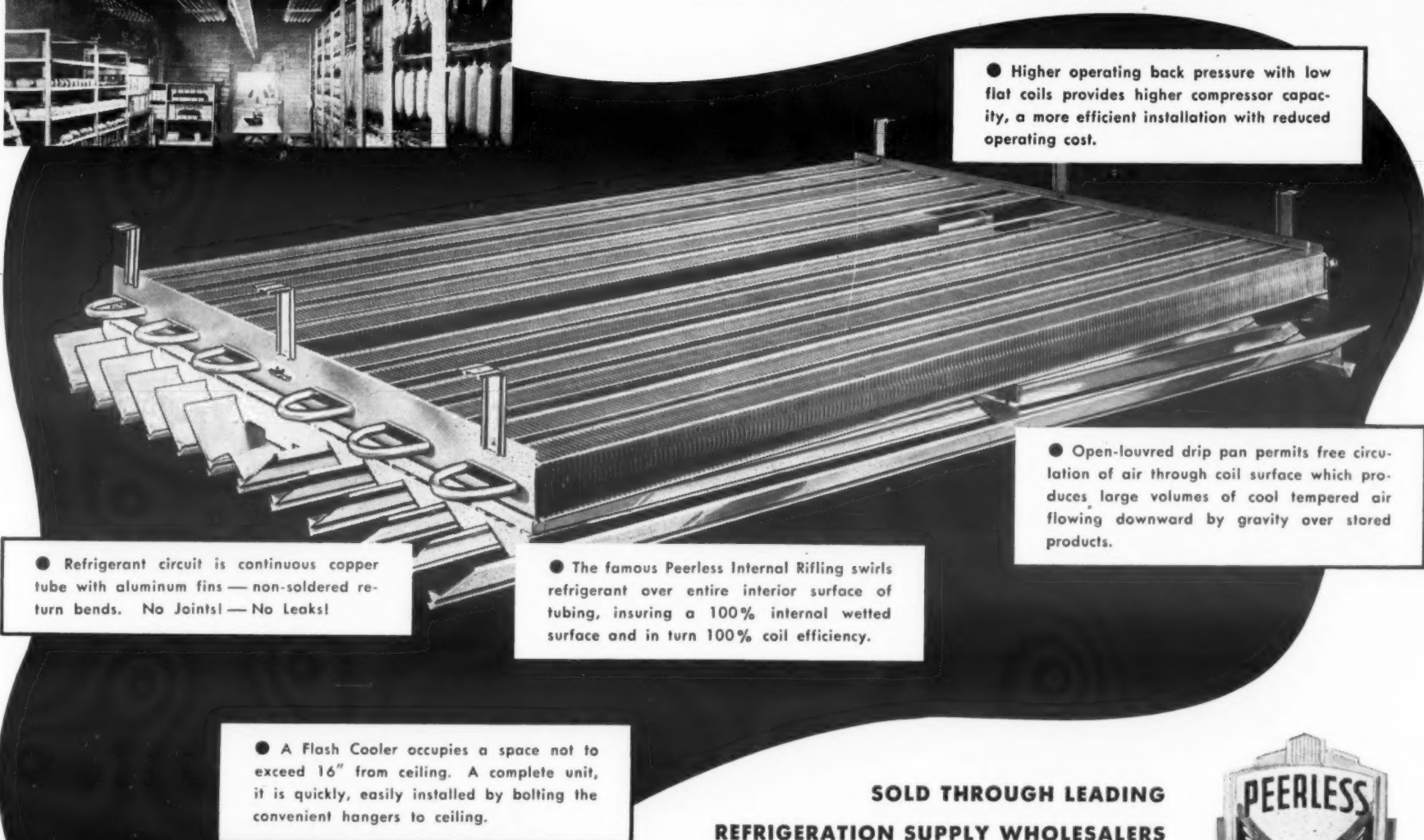


## For Positive Maintenance of HIGH HUMIDITY...

# PEERLESS FLASH COOLERS!

Where coolness without dehydration is essential, PEERLESS Flash Coolers give the desired performance. These are the original Flash Coolers, introduced 15 years ago by PEERLESS, and improved to their present high-efficiency in the refrigerating of cut meats, flowers, and all products where high humidity must be maintained. Wide, shallow coils spread under ceilings enable these units to deliver large volumes of cooled air with high relative humidity. Install them in cold storage boxes, walk-in and reach-in refrigerators, for retailers, wholesale houses, packing houses. Better preservation of products by PEERLESS Flash Coolers brings customer satisfaction.

For superior performance specify all these PEERLESS products: Flash Plates, Flash Coolers, Unit Coolers, Ice Cube Makers, Fin Coils, Off Center Coils, Expansion Valves and Capacity Boosters. Write for Details.



Higher operating back pressure with low flat coils provides higher compressor capacity, a more efficient installation with reduced operating cost.

Open-louvered drip pan permits free circulation of air through coil surface which produces large volumes of cool tempered air flowing downward by gravity over stored products.

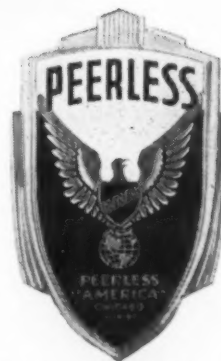
Refrigerant circuit is continuous copper tube with aluminum fins — non-soldered return bends. No Joints! — No Leaks!

The famous Peerless Internal Rifling swirls refrigerant over entire interior surface of tubing, insuring a 100% internal wetted surface and in turn 100% coil efficiency.

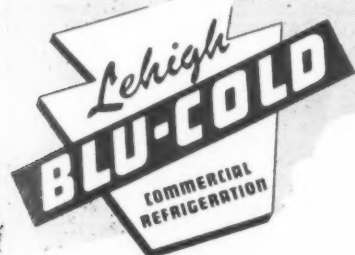
A Flash Cooler occupies a space not to exceed 16" from ceiling. A complete unit, it is quickly, easily installed by bolting the convenient hangers to ceiling.

SOLD THROUGH LEADING REFRIGERATION SUPPLY WHOLESALERS

# PEERLESS of AMERICA, Inc.



General Sales Offices 2901 Lawrence Ave., Chicago 25, Illinois, U. S. A.



Now Available In

### 110 MODELS

All Temperature Uses Freon or Methyl-Chloride

★ PACKAGED AIR COOLED

1/4 H.P. 1/3 H.P.

★ STANDARD DUTY AIR COOLED

1/3 H.P. 1/2 H.P. 3/4 H.P.

★ HEAVY DUTY AIR COOLED

1/3 H.P. 1/2 H.P. 3/4 H.P.

1 H.P. 1 1/2 H.P. 2 H.P.

★ HEAVY DUTY WATER COOLED

1/2 H.P. 3/4 H.P. 1 H.P.

1 1/2 H.P. 2 H.P. 3 H.P. 5 H.P.

Inquire about our Combination Air and Water-Cooled Units, 1/4 H.P. through 2 H.P.

See general catalog

for complete specifications.

Lehigh Mfg. Co.

LANCASTER, PA.

EXPORT DEPT. 39 BROADWAY  
NEW YORK 16, N. Y.



# Proper Temperatures, Air Conditioning Are Essential for Self-Service Meats

CHICAGO — "Some supermarket operators retailing meat on a pre-packaged self-service basis don't pay enough attention to the temperature of the meat."

"It must be received cool, wrapped cool, stored cool, and displayed cool. Operators apparently expect a self-service case to do all the work of keeping the meat cool."

This was a major point in a talk by J. Duncan Rankin of E. I. du Pont de Nemours & Co. before the self-service meat symposium held during the eleventh annual convention of the Super Market Institute at the Hotel Stevens here.

Air conditioning, he also implied, is an absolute necessity for the meat cutting and packaging room. As low a temperature as practicable is advisable, but "50° to 65° is about as low as you can go."

"Explain to the wrapping girls before you hire them that they'll have to work at these temperatures. Then they'll know about that part of the job and can come prepared with warm clothing," he suggested.

Tracing the development of pre-packaged meat operations, Rankin said, "As early as 1929, our company set up a program to study the possibilities of packaged fresh meats. H. C. Bohack Co. was the first concern to see the advantages of this method of merchandising."

"Difficulties were encountered from the beginning due to inadequate re-

frigerated equipment, limitations in packaging materials, and the absence of self-service.

"Viewed in terms of today's knowledge, these early efforts were doomed to failure. However, they did serve a purpose in providing a sounder background on which to build later efforts."

"Little progress was made until the advent of the self-service store, which came a few years later. This new type of merchandising gave emphasis to the need for a change in the methods of meat retailing. Shortly prior to the war, one retail organization started a pilot operation to determine the soundness of offering meats on this basis."

## A Prime Objective

"The prime objective was to eliminate the week-end 'bottlenecks' created by the service operation. The initial attempts of self-servicing package meats were made from a reconstructed dairy case. The present type reach-in case was yet to come. Even with this crude beginning, this idea had immediate consumer acceptance."

"Later, the development of the proper type self-service case for this use was undertaken. With the availability of these improved cases, by 1941 the movement had spread to 37 concerns, large and small, with 239 store installations in over 28 states," Rankin said.

"It was also evident from these early operations that transparent packaging material was an essential part of the operation, but that an improved type of film was needed to retain the natural bloom of the meat. Du Pont research and technical groups set about developing such a packaging material."

"Pre-packaged meat received a very definite setback during the war due to a shortage of supplies, equipment and, of course, meat itself. Despite these handicaps, this movement continued to develop, particularly on the West Coast. This continuation despite obstacles seemed to give extra evidence of the appeal self-service meat had from a consumer standpoint."

"During this period, du Pont very carefully studied these operations in both chains and independent markets. Our technical and research staffs were active in learning more about the problems of this industry."

"As a result of this work, we have developed two special types of cellophane."

"One is known as MSAT-80 for packaging fresh meats. Experience indicates this film will assist in retaining the natural color of meats for 72 hours or longer, if the meat is held at the proper temperature. I'd like to emphasize that point—the meat must be held at the proper temperature!"

"The other special film (known as

## Improved Open Case Makes Bow at Institute



John Boland and Henry Haht (left), Milwaukee market operators, and Frank O. Karll (extreme right), Hussmann distributor, are all interested in details of Hussmann's new self-service meat case as outlined by A. B. Biddle, general sales manager, at the Super Market Institute's exhibit. The remodeled case is higher, bringing the display closer to customers; closer control of temperatures is claimed; there's a package stop at the front, and the pricing strip has been lowered.

LSAT Cellophane) was developed for cold cuts and smoked meats. This film permits the loss of a controlled amount of water vapor and is particularly suitable for this use."

"In 1945, a more comprehensive survey was made on a national basis to evaluate this pre-packaged meat idea in the light of dealer and consumer reactions. These findings were issued in the form of a progress report."

"In these surveys, retailers told us that self-service meats would help produce greater profits by increasing sales, decreasing waste, eliminating bottlenecks in their meat department, increasing possibilities of better merchandising all cuts of meats, and increasing labor efficiency. They also told us that this improved service had a very healthy effect on total store sales."

"Consumers told us they liked the idea due to its cleanliness, the convenience of shopping with no waiting, and the freedom of selecting the meat they desire. They stressed the advantage of seeing the take-home, ready-to-cook cuts, with the net price and the exact weight on each package."

"Since the war, this pre-packaged movement has expanded to practically all sections of the country at an accelerated rate, and continues to outpace our ability to supply the needed cellophane. The attitude of the buying public is more favorable than ever."

"As with many other new developments, it was apparent that refinements were necessary to insure best results. In this connection, our technical staff and field specialists in this work have been constantly searching for improvements in methods from the standpoint of better merchandising and more efficient production. They are endeavoring to crystallize the best methods of installing the self-service meat opera-

tion, in both the large and smaller markets."

"With your permission, I would like to discuss a few of the principal business factors affected by the introduction of self-service."

"The first and most important factor is sales volume," Rankin declared. "This, of course, is the direct measure of consumer acceptance of the packaging idea. Consumer acceptance has been outstanding, and substantial sales increases are the general rule."

"Please do not assume that these sales increases will be automatic just because you package your meat—they will not. Our observations have indicated that sales increases will depend on your following certain fundamental rules. These are:

## Rules Are Fundamental

"1. Start out with good quality meat, and measure this quality at the time the consumer buys it."

"2. Maintain this quality by proper refrigeration throughout the processing and selling operation."

"3. Trim the meat for kitchen and table convenience."

"4. Package it attractively—to reflect quality."

"5. Insist on adequate labeling."

"6. Set up and maintain a good display at all times."

"The use of an attractive and intelligent hostess has been found helpful for case supervision and customer guidance."

"The next important factor used in appraising the success of pre-packaged meat is the matter of gross profit."

"Some successful operators tell us one of the elements affecting gross profit is the fact that close trim has been found to be essential, in order to make units that have the greatest sales appeal. While this close trim

(Concluded on next page)

Here it is, Mr.  
Service Man...

# EASY STREET



## WHERE HARDWARE REPLACEMENT BRINGS THREE-FIGURE SALES

It's a street of restaurants, taverns, food markets, fountains. There's one just like it in your town . . . where YOU can double or triple your average profit per service call.

"Easy Street" for YOU . . . because its occupants are having a tough time with broken, loose-fitting, tough-looking hardware on coolers, back-bars, and display cabinets. Easy Street for YOU . . . because you can salvage their losses and equipment with handsome, efficient, smooth-working, new hardware from Grand Rapids Brass. and pick up a nice profit in addition to service charges.



WHEN IT TRIPS  
... IT GRIPS

## Get This Installation Manual Today!

We've made it easy for you to sell and install new hardware on commercial cabinets. Our new installation manual gives full instructions. Tells how to handle a prospect . . . provides simple installation methods and short-cuts . . . gives scale working drawings and offset data. Keep a copy with you ALWAYS. Get it from your jobber or write direct . . . it's FREE.

JOBBER: Double your hardware profits! Get behind this replacement drive! Drop us a line . . . we'll see that you get full information.



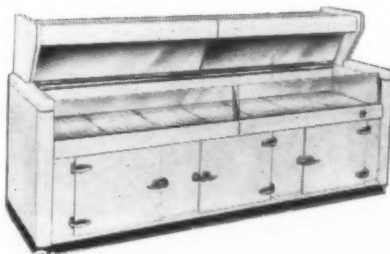
FREE  
Ask Your  
Jobber  
If he can't  
supply, write  
us direct for  
your copy.

**Grand Rapids Brass Company**  
Division of CRAMPTON MANUFACTURING COMPANY  
Grand Rapids 4, Michigan

# Introducing

A Beauty!

the MIRACOO  
SELF SERVICE CASE



The makers of the famous MIRACOO Walk-In Coolers take pleasure in introducing the latest addition to the MIRACOO family . . . the Self Service Case for dairy products and meats, with removable ends for length continuity. A beauty in performance as well as in looks, this open type display case is made almost entirely of porcelain. It has one-half inch of plate glass protecting the front of the cooler, and top efficiency is assured with a 12 tube fin coil. Tilted top mirror and two rows of fluorescent lights allow excellent display.

Lower storage with additional coils has following capacities: 8 ft., with two doors, 29 cu. ft.; 10 feet, with three doors, 37 cu. ft.; and 12 feet, four doors and 45 cu. ft.

Write today for further information about MIRACOO'S Self-Service Case and famous Walk-In Coolers.

**The CLEVELAND REFRIGERATOR CO.**  
2901 EAST 65th STREET • CLEVELAND 4 OHIO  
Manufacturers of Custom-Built Refrigerators Over A Quarter Century





## Cutaway Models Always Attract Attention



A cutaway model of Frigidaire's commercial Meter-Miser unit attracted the attention of many visitors to the Super Market Institute exhibit, including Mr. and Mrs. Ray Alpert (left), Manitowoc, Wis. market operators, and Mrs. Ben Holman.

## Self-Service Meats Can Cut Labor Costs

(Concluded from preceding page)

may reduce the return on some cuts, we have found that this reduction can be largely offset by the increased return secured from attractively presented cuts of the less popular type.

"In other words, it is necessary to look at the operation in terms of the whole carcass rather than the return on any single cut," said Rankin.

"It might be pointed out here that packaging of meat makes each cut its own salesman. There is the challenge to make each such cut present itself to the value-conscious housewife in an attractive and inviting manner so she will see in it a product that she wants to serve to her family and ones that represents 'a good buy.' As it meets this challenge, it will command a selling price that yields the proper gross profit.

"To a certain extent, fresh meat is now proceeding along the same path that cut-up poultry took several years ago insofar as education of the housewife concerning prices based on gross versus net weight.

"We appreciate that this point of maintaining gross profit has been regarded as a debatable one, but we can merely re-emphasize that today it is being done rather successfully by organizations that have a national reputation for shrewd meat merchandising. Processes of thinking that have been built up through ingrained habits must, however, be shelved.

### How to Control Costs

"Another consideration is the factor of costs. Naturally it is desirable to keep these at a minimum. The two main costs are for labor and supplies. Labor represents the largest single burden.

"Factors to take into consideration in the control of costs are:

"1. Production scheduling based on an analysis of the demands of your customers. To expand this point briefly, packaging naturally requires

preparation in advance of sale. A close analysis of sales according to types of cuts therefore permits proper scheduling and keeps operators working at peak efficiency.

"2. Proper production room layout to get top labor efficiency. As a matter of interest, the subject of layout is featured at our booth. From this display you might get some helpful ideas.

"3. The use of conveyors to increase efficiency. This is being tried by some operators.

"4. Faster and more accurate weighing by using proper scales. One account reduced the cost of weighing and pricing one-half cent per package.

"As there are so many variables in this business, it is hazardous to use figures for cross comparison without knowing the details. Let us cite what really can be done, however:

"One store of good volume, cutting meat on a close trim basis, with fish and poultry included in the operation, with the department manager and a hostess included, has a labor cost lower than the best service meat department in 100 stores studied in one chain!

"One of the variables, as you know, is 'How many meat items do you receive already prepared for self-service by the meat packer, such as franks and bacon?' We have found the prepared items run as high as 30% in some cases, and you may expect this percentage to grow. Prepared items of course reduce the amount of packaging required in the store.

"The point is that the labor costs of packaged meats, properly handled, can be put on a sound basis.

"The other major cost factor is supplies. Here, too, the number of packaged meats bought from the packer ready-to-sell has a great influence on reducing supply costs," Rankin declared.

"The supply costs in one market

with pre-packaged meat were equal to the average of the best 10 stores with service meat departments in the chain.

"This favorable cost situation was the result of doing three things:

"1. By using a specification packaging chart. This chart clearly shows the correct board, tray, 'celery' tape, and size sheet to use on each cut,

thereby assuring the efficient use of materials.

"2. By reducing rewraps through correct trimming and proper use of boards and trays to cover sharp edges. Also some operators found rewraps are kept down by tying the larger cuts with red 'celery' tape.

"3. Finally, by the proper handling of the cellophane to avoid waste.

"Naturally when the operation is first started, costs are admittedly on the high side, but, with experience and refinements, these costs have been made comparable to the cost of service selling.

"In the case of Operator 'A,' who runs a small market, labor and supply costs were brought from 11 cents per pound down to 5 cents per pound."

## TRAFFIC CENTER

The meat department is the focal point in food stores. SHERER display cases naturally attract the flow of traffic by making possible outstanding displays of perfectly kept meat.



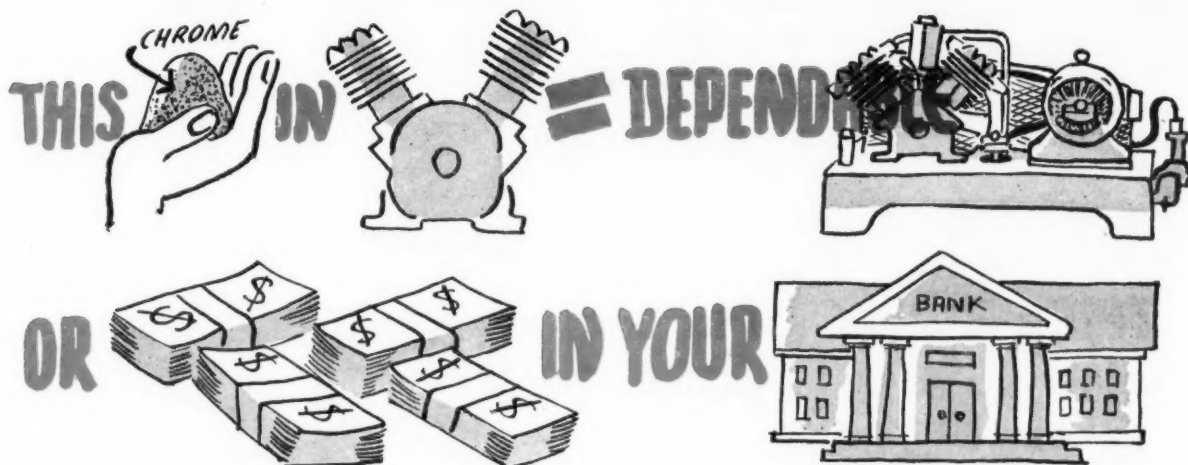
REFRIGERATED MERCHANDISERS

SHERER-GILLET CO., MARSHALL, MICHIGAN

BRUNNER  
SINCE 1906

REFRIGERATION helps you serve better

### Memo to Equipment Installers



That handful of chrome in the compressor casting can well be the starting point of more profits from sales and more complete customer satisfaction. This and many other technical reasons why Brunner condensing units have become "most wanted" will make interesting listening and your business more profitable. Spend a little time with a Brunner factory representative\* who talks your language — knows your sales and service problems.

The recognized quality of Brunner units has forced greatly expanded manufacturing facilities—new buildings—more assembly lines—latest developments in precision machinery. It makes good sense to "check up" and have the advantages of Brunner acceptance by your trade.

\*Write us. When would you like to have him stop in?

BRUNNER MANUFACTURING CO.  
UTICA 1, NEW YORK, U. S. A.

## THE MOST REVOLUTIONARY THING IN BARS SINCE PROHIBITION!



The 3-N-1

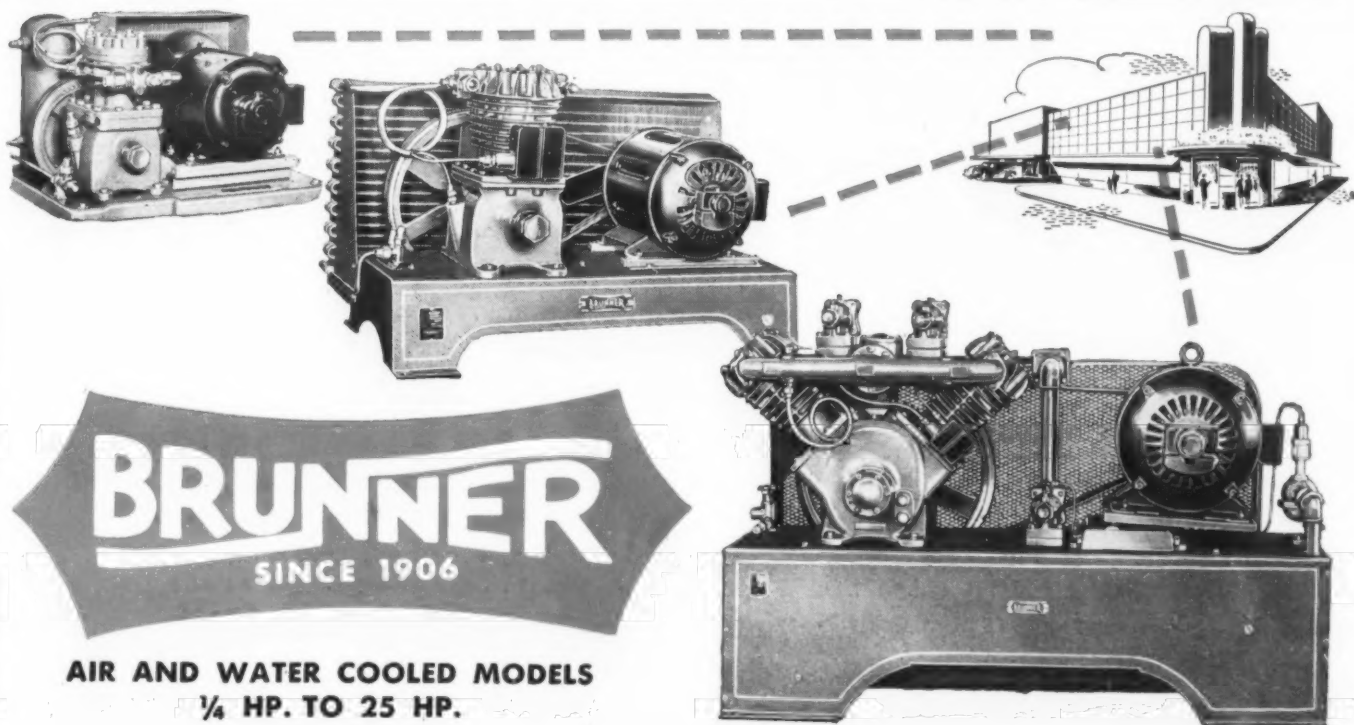
### What it Does...

- Soda, cola, and ginger ale from one faucet.
- No discoloration of drinks.
- Syrup gravity fed.
- Six seconds for 8 ounces.
- Compact-Labor Saving-Profit Making.

The exclusive locked in "BOOSTER" gives up to 25% more carbonation—plus perfect mixture from tank or carbonator...

Dealer and Distributor Inquiries Solicited

AMERICAN DISPENSER  
CORPORATION  
624-628 South Paulina Street  
Chicago 12, Illinois





## They'll Do It Every Time . . . . By Jimmy Hatlo



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VOLUME 54, No. 7, SERIAL No. 1,004, JUNE 14, 1948

Their Minds Are Wide Open  
But We Won't Come In

(Concluded from Page 1)

here we are sitting in our chairs waiting for an open-minded public to come to us and pry the unwilling story from our languid lips.

Let us go forth and tell our new and interest-compelling story. Let us tell it to men and women in their homes, at social gatherings, in our daily conversations, in newspaper's reading columns, in advertising and promotion, in our educational institutions, through demonstrations. Let dealers use all available channels of communication to carry the news of the family freezer and its economy and utility advantages into the fore-front of the public mind. No matter how we tell that wonderful story, let's tell it immediately and with a knowledge of the facts concerning the product. One can't make an empty bag stand up.

The wise dealer is recommending the purchase of a freezer with sufficient capacity to meet the full needs of the family. For only with adequate capacity in the freezer is it possible to enjoy substantial savings on the family food bill. We are showing families how to live out of the freezer and how to plan intelligently. Such practical planning makes it possible to use every bit of freezer space all of the time, and represents a great saving in food costs.

When presented to the farm family, your freezer savings story is even more impressive. The farmer grows on his own farm practically all of the food that can be preserved for use in his home throughout the year. The annual saving on his food bill is therefore greater. Concrete, understandable proof of this sort, touches the sensitive pocket-book nerve of the food buyer today, and can do much to speed-up the present lethargic food freezer selling program.

The retail sales presentation is mentioned only as an example of stimulating action in disseminating the story of family freezers where it will do the most good. Such retail presentations furnish both the dealer and the prospect with information that catches the imagination and can be translated into sales.

The modern family freezer which was yesterday's luxury, is today's necessity, but the housewives have to be shown while their minds are easy of access on anything that will lessen their work and worries. They have had little or no information on the subject of the family freezer and its advantages. Millions of housewives, distraught over living costs, probably are wondering why specialty appliance dealers, stores, salesmen, why anybody at all, doesn't tell them something about the family freezer.

Not since the arrival of the automobile and the radio have dealers had a more acceptable, convincing story to tell an open-minded public.

Specifically, here are the high points of that great story:

Food freezing does not cost . . . it pays through economical scientific food preservation such as the modern home freezer provides.

Owners of farm freezers report actual savings of \$250 or more a year.

What other home appliance can match such an economy record?

Practically every housewife today is a prospect. Armed with the facts a dealer doesn't have to talk "at" these prospects because he is equipped with facts enough to talk "with" them on a subject they don't understand but are willing to learn more about.

Multiplying sales results through public understanding of the product is the immediate task ahead. It is an exciting challenge for us all.



# NEMA Firms Report Sale of 348,461 Household Refrigerators In April

Nema Sales for April and First Four Months of 1948  
Complete Refrigerators Only  
(Lacquer and Porcelain Exterior Cabinets) (Advertised Sizes)

APRIL				
Sizes	Domestic (48 States and D. C.)	Canadian	Other Foreign	Total
1. Less than 4 cu. ft....	313	....	....	313
2. 4 cu. ft. ....	853	....	8	861
3. 5 cu. ft. ....	....	....	....	....
4. 6 cu. ft. ....	34,049	....	4,074	38,123
5. 7 cu. ft. ....	101,470	....	7,199	108,669
6. 8 cu. ft. ....	86,663	....	3,978	90,641
7. 9 and 10 cu. ft. ....	99,680	....	2,408	102,088
8. 11 and 12 cu. ft. ....	7,692	....	74	7,766
9. 13 cu. ft. and up ....	....	....	....	....
10. Total .....	330,720	....	17,741	348,461

FIRST FOUR MONTHS				
Sizes	Domestic (48 States and D. C.)	Canadian	Other Foreign	Total
1. Less than 4 cu. ft....	987	....	....	987
2. 4 cu. ft. ....	3,830	....	124	3,954
3. 5 cu. ft. ....	....	....	....	....
4. 6 cu. ft. ....	124,452	....	16,906	141,358
5. 7 cu. ft. ....	425,186	703	29,975	455,864
6. 8 cu. ft. ....	363,935	66	13,736	377,737
7. 9 and 10 cu. ft. ....	274,283	2	6,911	281,196
8. 11 and 12 cu. ft. ....	29,856	....	186	30,042
9. 13 cu. ft. and up ....	1	....	....	1
10. Total .....	1,222,530	771	67,838	1,291,139

Participating companies: Admiral Corp.; Crosley Div., AVCO Mfg. Corp.; The Coolerator Co.; Frigidaire Div., General Motors Corp.; General Electric Co.; Gibson Refrigerator Co.; Hotpoint, Inc.; International Harvester Co. (In April 1, 1948); Nash-Kelvinator Corp.; Norge Div., Borg-Warner Corp.; Seeger Refrigerator Co.; and Westinghouse Electric Corp.

## Mfrs. Sponsor Most Video Shows on Midwest Section Beck Manages Crosley Div. Range Section

MINNEAPOLIS — Refrigeration equipment manufacturers are carrying the heavy load of television advertising over the Twin Cities only television station KSTP (NBC) with Nash-Kelvinator, General Electric, Northeast Radio Service, and Roycraft Distributing Co., all scheduling sponsored video time.

The GOP and Democratic National Conventions are planned to be telecast here. A series of micro-relay stations are planned to furnish network television for Twin Cities sponsors prior to completion of a coaxial cable now under construction.

CINCINNATI — Appointment of B. O. Beck to the position of manager, Crosley range section, has been announced by N. C. Macdonald, general sales manager.

Beck succeeds Philip W. Pugh, who has resigned to become sales manager of Modern Distributing Co., distributor of Crosley products in the greater Cincinnati area, it was announced.

Beck has been with Crosley since 1946 as electric range engineer. W. R. Crawford replaces Beck as electric range engineer, Macdonald said.



**Quality Counts Most When you can see it!**

When it comes to making sales of your product to the public, the appliance dealer puts heavy emphasis on the quality features that the customer can see and easily understand. Things like interior arrangements, capacity, and shelving. She will take your word for the mechanical excellence of the appliance, but she draws her own conclusion about what she can see. When it comes to refrigeration shelving, leading producers have come to depend on United for they know that our capacity to mass produce this specialty at low cost is exceeded only by our ability to maintain a quality standard that makes sales! For refrigeration shelving it will pay you to check with United First.



**UNITED STEEL AND WIRE CO.**  
BATTLE CREEK, MICHIGAN

# 11-Cent Boost Ends Electromaster Strike

MT. CLEMENS, Mich.—R. B. Marshall, president, Electromaster Inc., manufacturer of electric ranges, has announced that striking employees have voted approval of a new contract calling for an 11-cent hourly pay increase, of which 8 cents will be retroactive to last Jan. 13.

Acceptance of the two year contract, based on the G.M. agreement, ended the 43 day old strike. It calls for a 3 cent increase, June 1, 1949, and will run to June 1, 1950.

Of the 11 cent increase, 6 cents is fixed for the duration of the contract, with the remainder subject to variation according to the cost of living index.

## Raleigh, N. C. Gets New Dealer

RALEIGH, N. C.—A North Carolina certificate of incorporation has been filed by W. E. Bolton & Son Co., of Raleigh, to deal in electrical appliances.

# DOWN PAYMENT People Make Deposit Even When Dealer Asks None

NEW ORLEANS—H. Katz Co., appliance and plumbing fixtures firm, is advertising daily in newspapers here its no-down payment credit terms on major appliances.

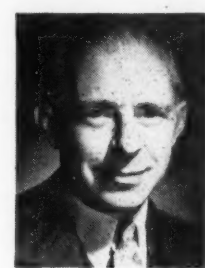
Lloyd Reynolds, manager of the store, reports that, surprisingly, only a small percentage of their customers take advantage of these terms, most preferring to pay something down, even if only the amount of the tax on the merchandise purchased.

The plan, Reynolds said, has been in effect ever since the repeal of Regulation "W." With no down payment, the purchaser is given 18 months to pay, but with a down-payment, the time is extended to two years. He says the firm is not losing by the plan, which, as far as is known, is the only one as liberal being offered in New Orleans at present.

The Katz store finds that electric refrigerators are the best sellers.

# Gibson Appoints Rees Head of Range Sales

GREENVILLE, Mich.—Gregory L. Rees has been appointed manager of range sales for Gibson Refrigerator Co. here.



Gregory L. Rees

Rees joins Gibson after being with Hotpoint since 1935 as range department manager after managing sales for the range and water heater divisions. For six years he was with the Bates Co. where he organized a national dealer organization for the sale of steel building materials.

## Deepfreeze Names J. G. Watts

LOS ANGELES—John G. Watts has been appointed district sales manager, Los Angeles district, for Deepfreeze Division, Motor Products Corp.

# This National Advertising is Selling INLAND ICE CUBE TRAYS for You!

It's Appearing in  
THE SATURDAY EVENING POST,  
COLLIER'S and  
BETTER HOMES AND GARDENS

Of the fifteen to twenty million owners of automatic refrigerators, there are thousands, maybe hundreds of thousands, who are *your* customers and prospects, in *your* territory.

All these prospects, *your* prospects, are getting time-after-time sales appeals in the biggest-and-best magazines—like The Saturday Evening Post, Collier's and Better Homes and Gardens—with the full story of the marvelous new Inland "Magic Touch" Ice Cube Trays. That's pre-selling—making sales and profits for you.

**Total Circulation  
Spring and Summer  
nearly 30,000,000**

How much market? You know that most homes have outmoded, battered, even useless ice trays—one, two or more of them. *Replacement*—new trays for *present* automatic refrigerators—that's your immediate opportunity for sales and profits. And the new Inland "Magic Touch" Ice Cube Trays are *so much* better that sales are amazingly easy—and profits are quickly made.

## THE TIME FOR PROFIT IS—NOW!

Get your share of these sales. Today, before you forget it, order Inland "Magic Touch" Trays from your manufacturer or jobber. Give them front display. Push them to service customers. Ride the wave of profits. And for continuing bigger sales and profits, *insist* that the refrigerators *you* sell come factory-equipped with Inland Trays.

INLAND MANUFACTURING DIVISION  
General Motors Corporation • Dayton, Ohio



**So Quick! So Easy!**  
big sparkling ice cubes freed instantly...

**Like Magic!**  
ice cubes in a twinkling!

**NEW INLAND "Magic Touch" ICE CUBE TRAY**  
Frees Plenty of Big Sparkling Ice Cubes Instantly

So simple! Just lift the "Magic Touch" lever, gently. The grid rises easily. There are your ice cubes—all separate, dry and free in the tray! Use one or more cubes now. The rest will be instantly ready later. You've always wanted that. Now you can have it. In your automatic refrigerator, with Inland "Magic Touch" Trays. And no mess! Sticking trays?—splashing at the sink?—ice cubes on the floor?—melted, wasted cubes? Up to now, maybe. But no more! All that's out—with Inland "Magic Touch" Trays. Made of sturdy aluminum for faster freezing and longer life.

Now Available at Leading Dealers. For your present refrigerator, get "Magic Touch" Trays from refrigerator dealers, or other stores. And insist that your new refrigerator have them.

INLAND MANUFACTURING DIVISION, General Motors Corporation, DAYTON, OHIO



**"Magic Touch" ICE TRAYS BY INLAND**





Shown examining the Kelvinator condensing unit at a recent Ebco sales training meeting for Kelvinator men are (seated l. to r.): G. T. Etheridge, commercial and parts sales manager, Nash-Kelvinator Corp.; A. R. Benua, president, The Ebco Mfg. Co.; and H. C. Patterson, commercial sales manager, Nash-Kelvinator. Standing l. to r.: I. E. Weber, Kelvinator; Douglas C. Salisbury, Kelvinator; C. G. Fosnaught, Ebco; J. J. Spring, Kelvinator; John Rolfes, Kelvinator; W. L. Winchester, Ebco; and Wayne Stafford, Kelvinator.

### Six-Outlet Junction Block Isolates Splice Joints

MILWAUKEE—A six outlet wiring junction block that isolates splice connections for maximum safety is now in production here at the United Mfg. & Service Co. plant.

Under the trade name "Nu-Blok," this device, which is said to virtually eliminate danger of short circuits from faulty soldering or stray wire strands, has applications in household refrigerators, freezers, refrigerated dispensers, water and beverage coolers, as well as reach-in cabinets.

Halbert W. Hoard, president of

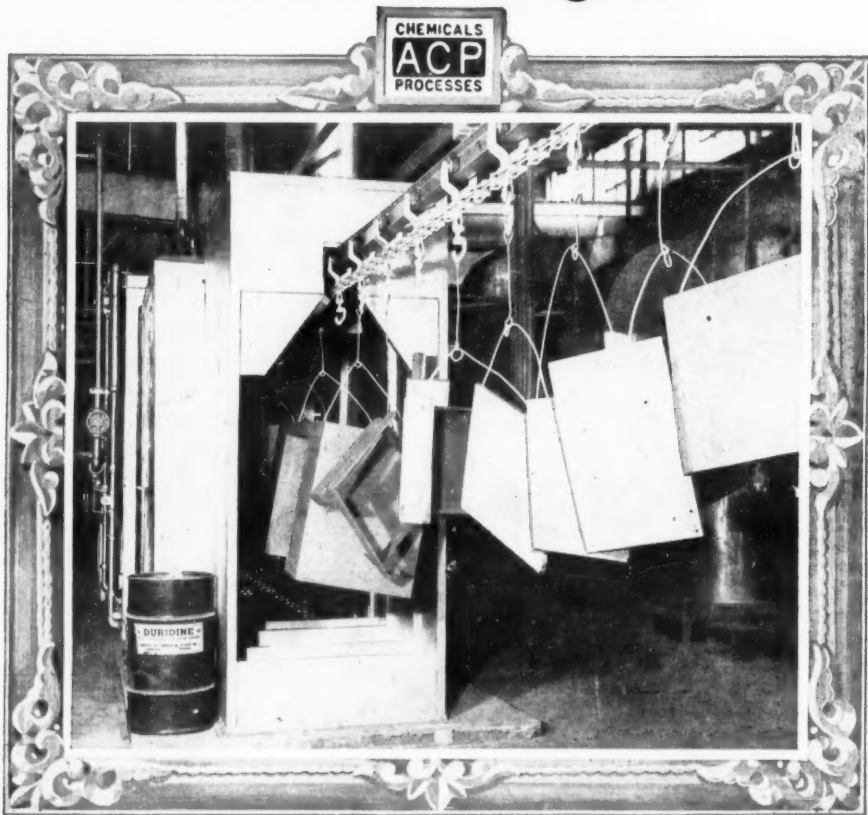
United and inventor of Nu-Blok, describes it as follows:

Leads are brought into the junction block through any of six openings and the bare tip of each one inserted in one of the narrow slots which are found inside each corner of the assembly. The splices are then soldered or fastened with brass clamps and the entire internal assembly press-fitted with a laminated phenolic cover.

This last step, Hoard pointed out, secures each splice at least an inch apart. Thereupon the Nu-Blok's cover is fastened down with a No. 10 self-tapping screw which holds the entire assembly to the mounting base.

In application unused outlets in the junction block can be sealed off.

### Picture of Progress



These white-finish kitchen cabinet assemblies are Duridized for long paint life and over-all product protection. Photograph courtesy of Tracy Manufacturing Company

**High Quality Paint and Metal Protection at a Minimum Cost!**

## Duridizing

**Provides Simple, Effective, Economical, Rapid Cleaning and Phosphate-Coating**

It cleans and phosphate-coats.  
It is easy to operate—economical.  
It is flexible—can be applied in mild steel equipment.  
It is relatively free from sludge.  
It imparts excellent protection to painted sheet metal.  
**DURIDIZE, means economize, in conditioning sheet steel surfaces for paint.**

Pioneering Research and Development Since 1914

## AMERICAN CHEMICAL PAINT COMPANY

AMBLER, PA.

Manufacturers of Metallurgical, Agricultural and Pharmaceutical Chemicals

### Do Your Own Recruiting

## Personally Trained, Well Paid Servicemen Build Good Business for Buffalo Dealer

By George M. Hanning

BUFFALO — Recruit your own servicemen, train them yourself, and pay them well.

That formula for a good appliance service organization has worked for Paul Readett, president of Frontier Refrigeration Co., Inc., here.

Frontier handles Frigidaire commercial and domestic appliances and air conditioning. In addition, the company does all service work for non-servicing Frigidaire dealers in the city.

Though a large share of its business now comes through servicing, the firm started out in 1939 strictly as a sales organization. However, when Frigidaire branches stopped handling service during the war, Frontier moved into this field. Today the firm has 11 servicemen and two salesmen.

Service work is barely profitable in itself, though, Readett finds. Its chief value, he claimed, is the leads it provides for sales. Much of the company's servicing is done for commercial and industrial accounts.

### Seeks Inexperienced Men

When Readett decides to add to his service organization, he seeks men inexperienced in appliance repair work who can train under the G. I. bill. He brings them right into his own shop and trains them on Frigidaire equipment.

Getting a man who has had no previous experience and teaching him to service Frigidaire appliances exclusively makes him a more valuable man than one who has worked on other makes and must be retrained, he said.

Of course, if a man has previously had Frigidaire training, that is all to the good.

Readett teaches his servicemen to handle as many types of appliances as possible. This, he thinks, gives his organization much more flexibility than if he attempted to make each man a specialist on particular appliances.

Frontier's servicemen start out at \$1.25 per hour for a 40 hour week. As they gain in experience, their pay is raised to a maximum of \$1.70 per hour.

The men use their own cars in their work and are paid six cents a mile to cover expenses. They own their own general tools, but special tools are supplied by the company.

This compensation plan is one of the highest paying in Buffalo for appliance service work, Readett claimed, and works out very satisfactorily.

Readett hires no men for short periods to handle peak service loads. Rather he attempts to spread the service work so that it can keep all the men busy the year-round.

He does this by direct mail advertising to his service accounts. Each month he has a local advertising agency send out a letter or a post card that bears a seasonal message and reminds the account of his services.

Readett intends to start his adver-

tising campaign in July this year, so that results from it will start coming in in the fall, when service work normally slackens off.

He does no newspaper advertising, believing that direct mail serves his purposes best.

### Supplies Fair, Sales Good

Supplies of appliances are coming through fairly well, he stated, and sales are still good. Air conditioning is moving right along, but, he said, merchants here won't come to the point of buying until the weather really gets hot. Then they will all want equipment right away.

"It's just human nature," Readett declared.

Air conditioning possibilities are somewhat limited here by the comparatively short hot season, he indicated. There are only three months of the year when air conditioning is required.

This fact has caused many small businessmen and home owners to weigh carefully the value of air conditioning in relation to the heavy initial cost, he inferred.

Readett also employs a woman appliance demonstrator who puts the appliances displayed on the sales floor through their paces for prospects. She follows through on sales with demonstrations in the home of the purchaser.

## Carolina Firm Completes 15 Air Conditioning Jobs, Is Working on 2 More

CHARLOTTE, N. C.—A total of 15 installations were completed and contracts for two others negotiated recently by Page Air Conditioning Co., Inc., officials report.

Those listed by Jesse W. Page, Jr. include jobs in nine North Carolina towns and two towns in adjacent counties of South Carolina.

Newest work just begun is the air cooling of the Amos & Smith Hosiery Mill (Pilot Mountain) as well as the air conditioning of the ball room, dining room, and lobby of the Selwyn hotel.

In Charlotte the firm has recently finished installations at the American Trust Co., Power Brake Co., Pittsburgh Plate Glass Co., F. E. Robinson Co., Nelson Page Jewelers, Harris-Hart Clothing Co., and the Harris Clothing Co.

Other jobs in North Carolina include: Spindale Cotton Mills (Spindale); Cochrane Furniture Co. (Lincolnton); Mauney Mill (Kings Mountain); Costners' Jewelry Store (Lexington); Bank of Raeford (Raeford); and Kay's Dress Shop (Rockingham).

The Page Co. has also installed air cooling units at J. M. Brewer (Kershaw, S. C.) and B. F. Kurtz's New Craft Shoe Shop (Rock Hill, S. C.).

Page Air Conditioning Co., Inc. was formerly operated by Page as Page & Co. and was successor to Page-Williamson, Inc., a firm incorporated in 1936 by Page and W. H. Williamson.

## VIRGINIA MAKES FINE REFRIGERANTS

DON'T FORGET  
"V-METH-L"  
Methyl Chloride

AND  
"EXTRA-DRY  
ESOTOO"  
Liquid Sulfur Dioxide

THEY'RE

**consistently pure  
consistently sure**

50 YEARS OF SERVICE TO INDUSTRY

**VIRGINIA Refrigerants**

West Norfolk • New York • Boston • Detroit

VIRGINIA SMELTING COMPANY, WEST NORFOLK, VA.

Distributors for Kinetic's "Freon" Refrigerants

AVAILABLE FROM WHOLESALERS COAST TO COAST

insist on  
genuine

**Marlo**

products

**MARLO-HEAT TRANSFER**  
Since 1925

**Superior**

**VALVES, FITTINGS  
and ACCESSORIES  
For All  
Refrigeration and  
Air Conditioning Systems**

**Superior Valve and Fittings Co.**  
PITTSBURGH 26, PENNA.



## Basic Data on Heat Transfer Rate of 'F-12' Disputed In Presentation at ASRE Meeting

SWAMPSCOTT, Mass.—Basic data (subject to some dispute) on the heat transfer rates of evaporating "Freon-12" in a horizontal tube evaporator was presented before the American Society of Refrigerating Engineers at its spring meeting here by W. F. Witzig of the Westinghouse Research Laboratories.

The data was developed in tests conducted by Witzig, G. W. Penney of the laboratories, and J. A. Cyphers, George Westinghouse Professor of Engineering, Carnegie Institute of Technology.

In claiming the tests indicated that the heat transfer rate is not appreciably changed along the evaporator tube until 70% of the liquid "Freon" has been evaporated, the authors encountered some opposition from Carl Ashley of Carrier Corp.

After the point of 70% evaporation had been reached, the heat transfer rate dropped rather sharply, the authors claimed.

"This view is not valid," asserted Ashley, who also differed with the authors on their point that the addition of 1% oil to the circulating "Freon" reduced the heat transfer rate only slightly.

"Oil does have a greater effect than stated because it changes the temperature at the end of the coil in actual practice," Ashley said.

Practical application of the data obtained in the tests was questioned also by H. B. Pownall of York Corp., who pointed out that the authors had started with 100% liquid refrigerant in their evaporator, "which we in air conditioning work seldom have."

The test setup used in these experiments consisted essentially of a heavily insulated length of 3/8 in. copper tube serving as the evaporator in a sealed system using no condensing unit. Measured heat for evaporation was provided electrically by Nichrome wire wrapped around the evaporator tube. Alcohol served as the condensing medium for the refrigerant, which was introduced to the evaporator in a 100% liquid state.

Test data was obtained by means of thermocouples located along the evaporator, pressure gauges and a rotameter for measuring flow rates, Witzig explained.

Mass flow rate of the "Freon-12" in a range of 0 to 16 lbs. per hour had virtually no influence on the temperature difference (and thus the heat

transfer rate) between the evaporator wall and the refrigerant, the authors found in their experiments.

Very large rates of flow, however, would probably have a definite effect on heat transfer rate, admitted the authors.

A second major point (already cited) was that the heat transfer rate was not altered by the presence of "Freon" vapor until about 70% of the liquid had been evaporated.

The heat transfer rate also showed a close correlation with the temperature difference between the evaporator wall and the evaporating refrigerant, the authors said.

"Very important," said the authors, is the relation between the temperature at which "Freon-12" is evaporated and the heat transfer rate. At the same temperature difference, the heat transfer rate goes down as the evaporating temperature is lowered, they explained.

## Shumate Will Represent Weber In Pacific Northwest

SAN FRANCISCO—Charles E. Shumate has been appointed district representative of the Weber Showcase & Fixture Co. for the Pacific Northwest area with offices at 2260 Palou Ave., San Francisco.

Shumate, former export sales representative for Weber, will work with commercial refrigeration, low temperature, and soda fountain dealers in northern California, Oregon, Washington, the northwest tip of Idaho, and the Reno, Nevada trading area, states J. L. Kaufhold, manager of Weber's National Sales Division.

Shumate started his selling career in 1926 with the *San Francisco News*. In 1934, he joined the Equitable Assurance Society of the United States as an independent agent, and in 1938, the Mid-Continent Airlines. In 1939 he was appointed director of press relations and assistant advertising manager.



## New Cold Paint Stripper Developed for Industry Use

CHICAGO—Allied Finishing Specialties Co. here has announced a new cold paint stripper for industrial users to be sold under the "Electro" name.

It is stated that the new finish remover is non-flammable and is non-injurious when used as directed. It removes paints, lacquers, enamels, synthetics, varnishes, and wrinkles. Its specialty, Allied says, is baked type finishes.

Electro stripper is said to be intended for use as a dip, but it may also be brushed or sprayed on. Removal of finish requires only a few minutes, it is explained, and the new finish may be applied at once.

## 32-Piece Kit Aids In Servicing Oil Burners

CHICAGO—Lovejoy Flexible Coupling Co. here is manufacturing a 32-piece kit designed to enable servicemen to repair any standard oil burner.

Neoprene cushioning is used because it resists the rotting action of oils, yet absorbs vibration, according to Lovejoy.

Two splined hub adapters to fit shafts from 5/16 to 5/8 in. are included. Adjustments, it is said, can be made for distances from 1 1/2 in. to 5 1/2 in. between drive and driven units.

The steel container has a baked-on crackle finish. Space for dealer imprint is provided inside the lid of the kit, which has a list price of \$12, according to the manufacturer.

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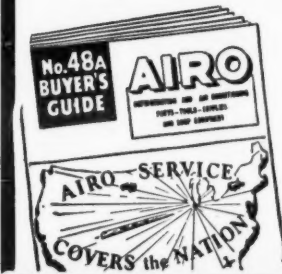
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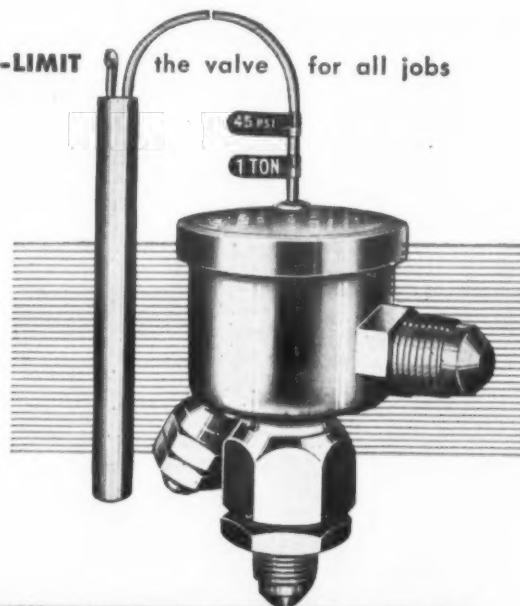
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The 4-oz. bottle treats \*32 lbs. of refrigerant, \$3.00  
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Since 1925

### Feeling Is Believing!

## Miami Dealer Uses Own Air Conditioning To Sell Jobs Ranging from 1/2 to 350-Tons

MIAMI, Fla.—Operations of Fixzit System, air conditioning contractor here, are now going forward in a new \$150,000 showroom and fabrication building at 1118 N. E. Second Ave.

The building combines a 100 by 200-ft. open-air yard for heavy compressors, piping, etc., with prefabrication shops on the second and third floors. Also located on the second floor is a 15-ton package air conditioning unit which keeps the showroom, executive offices, and drafting room at 80° the year around.

"Maintaining our own air conditioning system in this way has proven an ideal sample," Jack S. Mintzer, vice president and secretary of the firm, pointed out. "We've sold a lot of contracts from merely demonstrating how our own system works."

The firm, which went into operation under the Mintzer aegis in 1936 (I. L. Mintzer is president), is said to be one of the largest air conditioning dealerships in the South. It handles installations ranging from half-ton package units to 350-ton remote control systems.

Fixzit System was installing large-scale equipment just before the war and is now working on numerous contracts for hotels, restaurants, clubs, etc. at nearby Miami Beach, according to Jack Mintzer. In March, the company received a Worthington franchise covering the West coast of Florida from Miami to Fort Meyers.

Recently-completed installations include a 100-ton system in the Sea Isle hotel, a 200-ton job in the Delano hotel, and others in the Ambassador cafeteria and the Blue Horizon and Cromwell hotels. The firm also has contracts running up to as much as \$465,000 for installations in a huge apartment-house project on Miami Beach, in a series of hotels under construction, and in commercial establishments.

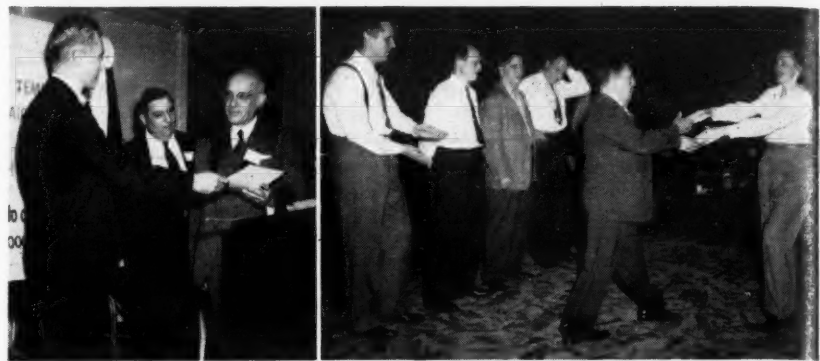
Along with its air conditioning activities, Fixzit Systems offers heating, plumbing, ventilating, and other services. Also, it carries a complete line of major appliances.

The refrigerator display, composed of step-up rows of boxes from 4 1/2 to 10 cu. ft., is one of the most attractive in the city. The company recently closed a contract for 387 refrigerators on a single apartment house job, indicating how well handling domestic refrigerators and commercial air conditioning can work.

### \$200,000 Bowling Center Will Have Air Conditioning

BINGHAMTON, N. Y.—Air conditioning will be installed in a new \$200,000 bowling center being erected here. The building will contain a restaurant and 18 bowling alleys and will be one of the largest of its kind in the area. Ward R. Murphy of Binghamton is general contractor.

## Fun and Sports Highlight ASRE Spring Meeting



Dan Ricker (right), retiring chairman of the Boston ASRE section, host for the spring meeting in Swampscott, receives a token of appreciation from O. C. Eckel (left) and Austin Ford. At the right is a typical scene from the rollicking barn dance.



ASRE golfers O. E. Norberg (Crosley), George Iwashita (Seeger), and Richard Clarke (Monsanto) watch closely as Robert Prisch (Monsanto) totals up the foursome's scores. On the right, Prof. A. M. Schelsinger, Jr. of Harvard is congratulated for his luncheon address by Charles Leopold, O. C. Eckel, and ASRE Vice President Burgess Jennings.

## Use of Smaller Diameter Tubes, and Closer Spacing Of Thinner Fins Results In More Compact Conditioners

SWAMPSCOTT, Mass.—Problems of mass production of packaged air conditioners have resulted in a trend toward more compact, lighter, and less expensive evaporator coils, reported T. C. Gleason of the Chrysler Corp. Engineering Division in a paper presented before the American Society of Refrigerating Engineers at its spring meeting here.

These "Refinement of Evaporator Coils for Packaged Units," as the paper was titled, are being achieved largely through the use of smaller diameter tubes and closer spacing of thinner fins, he emphasized.

Specifically, he attempted to point out the advantages of employing a 3/8 in. diameter copper tube with copper fins of .0045 in. thickness spaced as close as 13 fins to the inch.

"Much is saved in weight and cost with very little loss of thermal efficiency by using fins of this thickness," Gleason said.

"In addition," he emphasized, "the thermal efficiency on the air side of an evaporator coil is poor to begin with. Cutting the fin thickness does not make this appreciably less."

Another advantage in cost which this size of fin has, he admitted, results from the fact that .0045 in. copper is widely used in the automotive industry and it is thus readily available at comparatively low cost. From the theoretical standpoint this fin thickness might not be the best obtainable, but practical considerations were in its favor, Gleason said.

Use of small diameter tubes also

has the advantage of permitting thinner walls to be employed, he asserted.

Having as few rows deep in the coils as possible was also cited as an important economic factor. As the number of rows in a coil is increased, each succeeding row extracts less heat because the mean temperature difference between air and coil is being reduced as the air passes through the coil.

Since the weight (i.e., cost) of each row is the same, and the amount of refrigeration performed by each succeeding row becomes less, then the smallest number of rows will give the least cost per unit of refrigeration, according to Gleason.

Assuming then for a given set of conditions that the number of rows in an evaporator coil is reduced, to maintain the required coil capacity the only alternative is to vary the fin spacing, he continued.

Adding fins to the coil, of course, increases its weight, but Gleason pointed out that "as the number of fins per inch is increased, the weight of the coil per sensible capacity increases in direct proportion."

Good air conditioning practice also requires that the coil possess good latent heat characteristics, Gleason said.

He cited a comparison of coils with a two-row evaporator using the 3/8 in. tube and .0045 fins spaced 13 per inch which resulted in a latent to total ratio of 0.33.

"This ratio is good," he declared.

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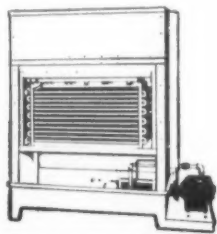
usAIRco's engineering staff has a talent for sound simplicity of designs, which is immediately apparent in their product . . . but they've never let their talent go to their head. They're still in there pitching to help you with even the simplest installations.

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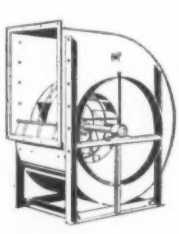
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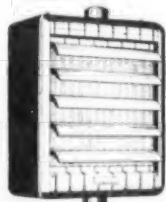
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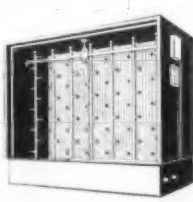
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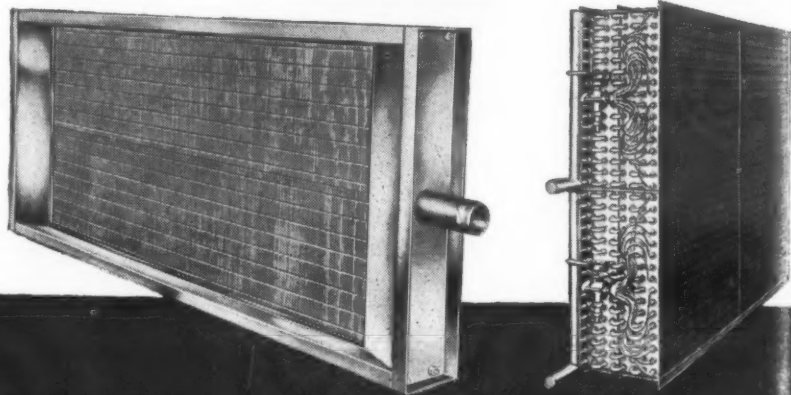
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# The KEY to AIR CONDITIONING

One of a series from

by James J. LaSalvia

## Effective Temperature

Effective temperature is an arbitrary index that will conform to the degree of warmth or cold felt by the human body under certain temperature, humidity, and air motion combinations.

Effective temperature cannot be read by a thermometer except on one condition. It is merely the results obtained by extensive research and actual experiments made on human beings with normal clothing by varying the temperature, humidity, and air motion in the room where they were placed, and by carefully checking each occupant as to his reactions.

After these experiments were conducted, all of the findings were placed in a form of a chart based on temperature, humidity, and air motion and called the Effective Temperature Chart or Comfort Chart. (See Fig. 1.)

This chart is based on dry bulb temperature, relative humidity, and on air motion of 15 to 25 f.p.m.

From the chart we can find the results obtained from such experiments.

1. That at no condition were 100% of the people comfortable.
2. That there are two comfort zones: One for the summer and the other for the winter.
3. That the effective temperature in the summer which satisfies the greatest amount of people (98%) is 71° F., and in the winter time (97%) of the people are mostly comfortable at 66° F. effective temperature.
4. We can assume, then, that the average comfort zone for the greatest majority of the people during the year will be between 66° F. and 71° F. effective temperature.
5. Also note that in summer a great number of the people can be comfortable as high as 75° F. effective temperature.
6. That in winter a great number of people can be comfortable as low as 63° F. effective temperature.
7. That while the effective temperature range for the year is between 63° F. and 75° F., the relative humidity range must be kept between 30% and 70%.

This chart has been based on occupants normally clothed for the respective seasons of the year. The effective temperature in any space can be raised or lowered by the following procedure:

- a. To raise the effective temperature:
  1. Wear heavier clothing.
  2. Lower the air motion.
  3. Raise the dry bulb temperature.
  4. Raise the relative humidity.
- b. To lower the effective temperature:
  1. Wear thinner clothing.
  2. Raise the air motion.
  3. Lower the dry bulb temperature.
  4. Lower the relative humidity.

The effective temperature, as stated before, cannot be read by a thermometer except on one condition and that is when the air in question is 100% saturated and with no air motion. In this case only the effective temperature will be the same as the reading of the thermometer.

In all other cases the effective temperature is always lower than the reading of the dry bulb temperature.

In winter it is customary to keep the air motion in the space below 25 f.p.m. for a proper system.

In summer it is customary to keep

the air motion in the space between 25 and 50 f.p.m.

For comfort cooling systems where the occupants are in the space longer than three hours it is good practice to keep a 73° F. effective temperature.

When the occupants are in the space between 45 minutes and three hours, it is good practice to keep the effective temperature at 74° F.

And when the occupants' stay is below 40 minutes, it is good practice to keep 75° F. effective temperature.

The above effective temperatures are for the highest outside design temperature condition only.

When designing an air conditioning system, check to see whether the inside design condition for the type of system falls within the above effective temperature conditions.

There will be a few types of jobs for comfort cooling where standard requirements must be adhered to in order to meet specified conditions or local and state codes, and in these cases the effective temperature as given above must be disregarded.

In maintaining the above effective temperatures there are a corresponding dry bulb temperature and relative humidity which must be selected for the inside conditions to be most effective.

Where 73° F. effective temperature is to be selected use 78° F. dry bulb temperature and 55% relative humidity.

Where 74° F. effective temperature is to be selected use 80° F. dry bulb temperature and 50% relative humidity.

Where 75° F. effective temperature is to be selected use 82° F. dry bulb temperature and 45% relative humidity.

In order to complete the inside design conditions, the wet bulb and dewpoint temperatures must also be known. These can be read from a psychrometric chart by using the corresponding dry bulb temperature and relative humidity as given above.

These inside conditions will be as follows:

Effective temperature	73° F.	74° F.	75° F.
Dry bulb temperature	78° F.	80° F.	82° F.
Wet bulb temperature	67° F.	67° F.	67° F.
Dewpoint temperature	61° F.	60° F.	59° F.
Relative humidity	55%	50%	45%

The above designs, it has been proved in the field, lessen the body shock on entering or leaving the air conditioned space.

The above shows that when the period of occupancy is short, the inside temperatures should be kept slightly higher than longer periods as the effect on the body will be sufficiently cool to carry for the duration of stay. But when the period of occupancy is long, the inside temperature should be kept slightly lower than shorter periods, as the effect on the body will stay sufficiently cool for the longer period.

### LENGTH OF STAY FOR VARIOUS ESTABLISHMENTS

The following list shows types of establishments which would fall under these various effective temperatures for design of inside conditions.

Up to 45 minutes stay: haberdashery, drug store, bank, barber shop, funeral home, general appliance store.

Forty-five minutes to three hour stay: Theater, department store, clothing store, cafeteria, restaurant, dining room, beauty parlor, church.

Above three hour stay: single office, general office, hospital, general

Fig. 1—Comfort Chart Aids Air Conditioning Design

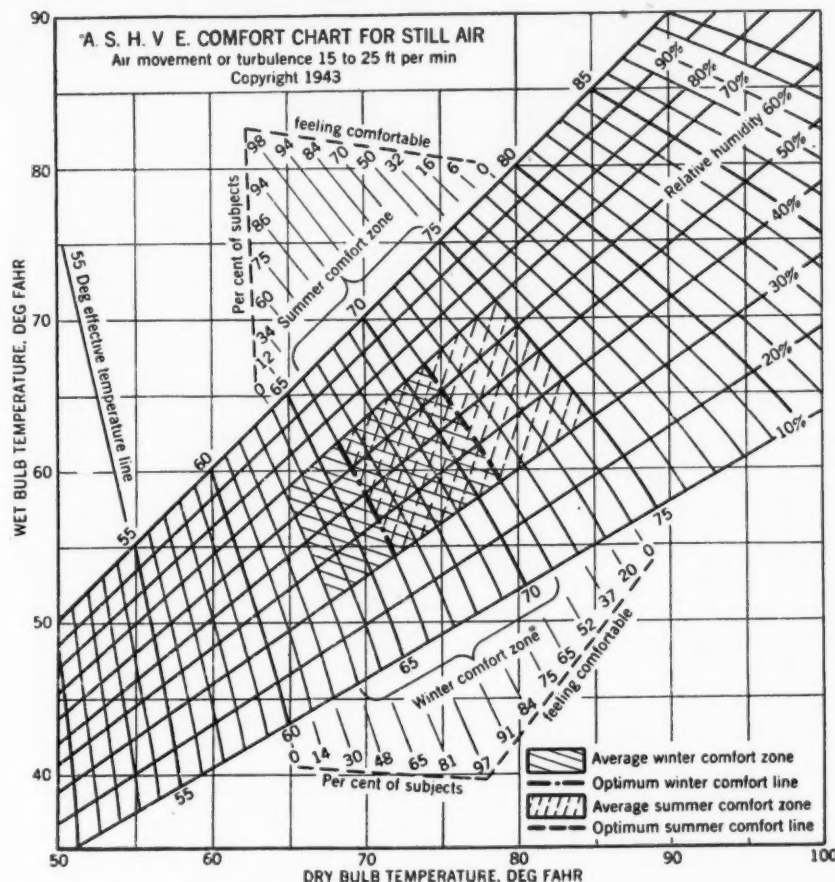


Fig. 1—Prepared by the American Society of Heating & Ventilating Engineers and published in its Guide, this chart defines average "comfort zones" based on a range of dry bulb temperature, relative humidity, and air movement.

ward, private room, drafting room,

There are various schools of thought on the preceding classifica-

tion of the inside conditions to be kept. Based on his vast experience both in designing and operating such systems, the author feels that the above will meet the best practices as applied in the air conditioning field today.

The preceding conditions will keep the refrigeration requirements within the limits of good practice. These limits apply to the human body and also the use of refrigerating machines at proper operating limits to get the least cost at proper results.

All of the above pertains to comfort cooling only and does not pertain to special systems or processing systems where set inside conditions are to be maintained.

(To Be Continued)

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Compact, fully automatic, marvels of efficiency in sizes up to 7-tons.

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**SPORLAN Solenoid Valves** will give you Peak Performance on all installations too, because the Sporlan Solenoid Coil is so well insulated...so moisture proof, that it defies electrical failure.

**Only SPORLAN Catch-Alls** can give you Peak Performance on all installations, for only the Catch-All has a porous molded cylinder. It cannot powder! It cannot pack! It dries the refrigerant to an extremely low end point. A point so low that any remaining moisture is absolutely harmless.

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**SPORLAN Strainers** are Peak Performers too, because they are designed better...precision built to closer tolerances, and contain the best materials obtainable.

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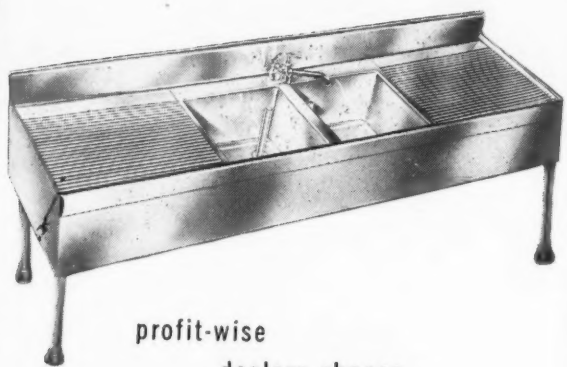
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### What's New

#### Elbco Model Provides '3 Stages' of Refrigeration



COLUMBUS, Ohio—The new Kelvinator-refrigerated KBR bottle-type compartment electric water cooler is being introduced by The Elbco Mfg. Co. here.

By a new method of capillary tubing control that utilizes an unusual refrigerating process, Elbco engineers under the direction of Louis P. Benua, general works manager,

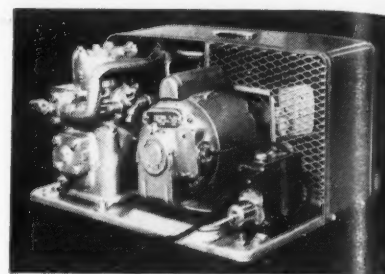
have developed a method of providing three simultaneous graduations of cold for water-cooling, cold storage, and ice cube freezing.

The triple-duty KBR Kelvinator-refrigerated cooler is being made principally to satisfy the demands for a sanitary piece of equipment that will at once provide properly cooled water for from 18 to 20 persons, furnish generous cold storage space, and freeze 28 large ice cubes. Quart milk bottles or 32-ounce bottles of carbonated beverages can easily be placed upright in the ample storage compartment.

Monel metal is used for making the storage compartment liner, cold plates, and interior fittings. The compartment door is of 18 gauge galvanized and Bonderized steel with streamlined corners and edges and is swung on stainless steel hinges.

The storage compartment itself, is insulated with 2 in. of ground cork. The compartment door is insulated with 1½ in. of cork board. Heat loss around the door is prevented by a tight-fitting, molded one-piece rubber door gasket that seals a one-piece molded plastic breaker strip matching the inside color of the compartment.

The door to the compartment is operated by a combination, push-button door-fastener and lock, furnished with two keys. The fastener snaps shut automatically when the door is closed. Locking is optional.



The Carrier Humidry

homes in warm climates which are closed for all or part of the summer and where furnishings and decorations suffer from mold or mildew. It can be used in all climates for basement playrooms and other areas where dampness and humidity cause deterioration and discomfort.

Other uses will be to prevent rust on valuable tools and to preserve permanent records in vaults against mold.

The Humidry can be plugged into an ordinary electrical outlet with only a connection for running moisture down a drain.

### Power Element Designed For Use on Ranco Line



COLUMBUS, Ohio—A completely new beryllium copper power element featuring greater sensitivity and positive action has been announced by Ranco Inc., manufacturer of refrigeration controls.

The new element was designed and developed by Ranco engineers for use on all Ranco controls.

Production of the beryllium copper power element is handled entirely in the modern Ranco plant, where complete control of materials, assembly, and testing insures precision craftsmanship.

### Furnishings Saved from Dampness by Dehumidifier

SYRACUSE, N. Y.—Production of a new, low-cost dehumidifier, capable of removing 34 pints of water a day from the atmosphere of a normal sized room in a humid climate, is announced by Carrier Corp.

The compact unit, known as the Carrier Humidry, operates inexpensively on a ¼-hp. motor.

It is particularly applicable to

### Husmann Makes New Double-Duty Meat Display Case



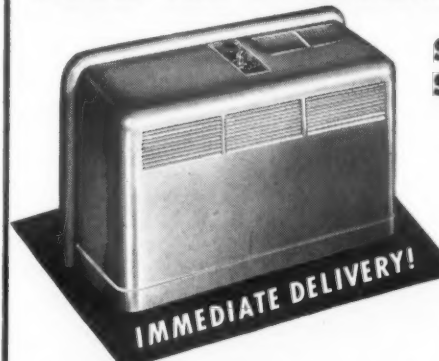
net framed display' feature which adds emphasis to the sales appeal of the products displayed," according to the announcement. Husmann "Humid-I-Coiled" refrigeration is said to provide proper temperature and essential humidity control at all times.

Door openings for service and storage are claimed to allow maximum freedom and working accessibility for the operator. New features incorporated into the case include automatic lights in storage section, bumper rail, and improved storage doors.

ST. LOUIS—Husmann Refrigeration, Inc. has announced a new, improved double-duty meat display case for the service meat department.

The case "embodies the 'sales mag-

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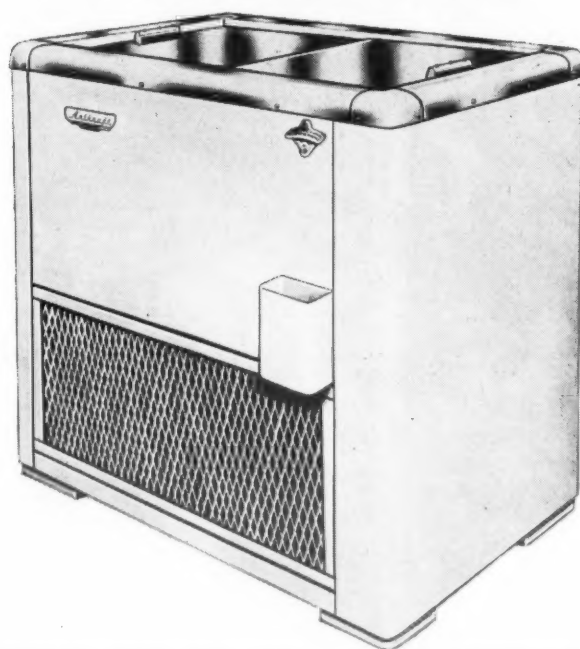
Sold under factory warranty.

Test boxes operated in our laboratory at 90° ambient required only 21% running time idle and 49% running time loaded to maintain operating temperatures. Cold control at midsetting showed 33° water temperature when operated as a wet cooler and 38° air temperature when operated dry.

Operating costs computed on the basis of our experience with test boxes operating for 16 hours per day under load at 2¢ per k.w. indicated probable operating expense of \$1.00 per month or less.

#### SPECIFICATIONS:

CAPACITY 5 cases bottles standing or 10 cases of same corded.  
SIZE 36" x 42" x 27".  
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FINISH Hi-Baked Dulux.  
COLOR White or Silver Blue (choice of color on quantity orders).  
INSULATION 3" Spun Glass-Sealed Cavity.  
TANK Pure Copper Sheet with coils attached to sides and bottom to assure fast conductivity of heat units.  
TOP 18-8 Stainless Steel.  
LIDS Stainless Steel, Two Slide—Overlapping.  
REFRIGERANT Freon 12.  
CONDENSING UNIT Fan Cooled Hermetic ½ H.P. 115 V, 60 Cycle, Permanently Oiled.  
SHIPPING WEIGHT 340 lbs.



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## What's New (Cont.)



### New Thermometer In 'Watch Pocket' Style

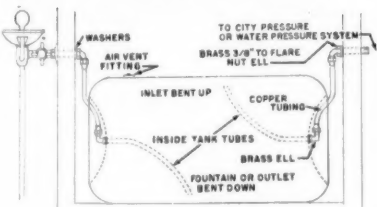
SKOKIE, Ill.—A versatile new low priced dial thermometer manufactured in watch-like pocket size has been announced by Jas. P. Marsh Corp. here.

In addition to convenient size, the new pocket thermometer offers the easy-reading feature of a dial type thermometer. It can be placed at any convenient point within the freezing compartment and when the temperature has registered, will plainly show the exact temperature on the clearly marked dial.

The instrument measures only 2 3/16 in. in diameter and is produced in a polished case of heavy-gauge stainless steel. An ingenious spring clip mounted on a swivel serves to hold the thermometer in the pocket when not in use, or serves as a hanger when taking temperature. Protection against rough handling is assured by an unbreakable crystal.

Should it ever be knocked out of adjustment, the Marsh "Recalibrator Slide" on the back makes correction simple; merely set it to coincide with a thermometer of known accuracy.

### Kit Gets Cold Water From Bottle Coolers



SILOAM SPRINGS, Ark. — A special kit which can be installed in a dry beverage cooler to provide cool drinking water has been developed by the Ralph Jones Co. here.

The kit consists of an 8-gal. capacity stainless steel pressure tank which fits inside the beverage cooler, a drinking water fountain for mounting on the outside of the cooler, and the necessary fittings.

Installation is claimed to be com-

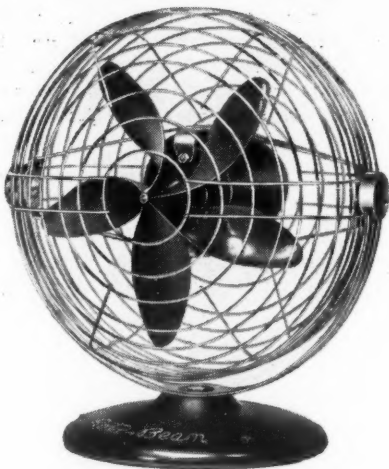
paratively simple. The tank, which measures 19 1/2 in. long by 12 in. in diameter, is first placed in the beverage cooler with the air vent fitting of the tank on top. At each end of the tank is a brass ell for connection to the copper tubing water lines.

Holes are drilled in the walls of the cabinet for the incoming water line and the connection from the tank to the water fountain on the front. Inlet tube within the tank is bent up so its outlet is near the top. Outlet tube (for the fountain) in the tank is bent down near the bottom.

After the kit is installed and connected to the water line, the air vent on the top of the tank should be loosened so all the air can escape after the water supply is turned on. After all the air is forced out by the water, the vent cap should then be tightened.

The complete kit lists at \$55, f.o.b. Dallas.

### Circulator Projects 2 Beams Into Room



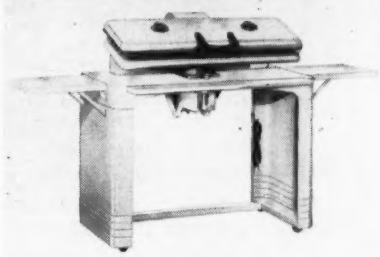
CHICAGO—A noiseless, five-bladed air circulator that projects two beams of air into a room has been placed on the market by Max Weber, local manufacturer and inventor.

One beam is within the other, Weber explained. The outer beam moves in a slow spiral, while the inner beam moves much more rapidly in a tight spiral. The resulting differential in pressure between the two air columns, he said, causes all the air in the room to move in a rhythmic, pulsating motion.

The silence of the Roto-Beam radiant air circulator, as the unit is called, is said to be the result of the propeller design. Five blades, with the full surface of each blade from tip to heel utilized for moving air, make the Roto-Beam a 100% efficient air circulator, Weber stated.

The Roto-Beam is made in both single and three-speed models. The former operates at 1,650 r.p.m., while the latter operates at 1,650, 1,150, and 800 r.p.m.

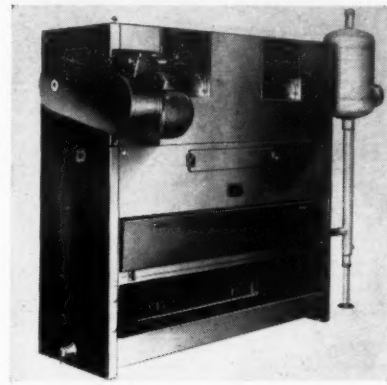
### Lower-Priced Hotpoint Ironer, Washer Shown



CHICAGO—Two new home laundry models—a low-priced flatplate ironer which is claimed to represent a \$30 saving to the consumer, and a 10-pound capacity wringer type washer—are being shipped to dealers by Hotpoint, Inc.

The new ironer model, LFN-1, will retail for \$199.75, and is the same in every respect as the LF-1, except that the cabinet has been removed and an extension shelf has been added, states L. I. Sweetland, manager of the home laundry department. The budget-priced model was developed in response to dealer demand for an economy ironer that would offer the same features included in the deluxe version.

Known as the LWP-6, the new washer will retail at \$169.75. This model is equipped with a wringer which "instinctively" stops when subjected to unusual pressure, thereby affording greater protection to the homemaker, the official said. Another dealer demonstration feature is the timer control which regulates washing time from one to 15 minutes.



### Acme Makes Unit Coolers For Varied Applications

JACKSON, Mich.—Acme Industries, Inc. here has recently introduced its new "Blo-Cold" industrial unit coolers.

Series B and C of the new line are designed for dry coil operation for general cold storage applications, using finned coils.

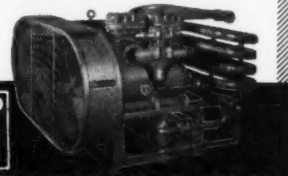
For low-temperature applications requiring continuous brine spray operation to keep coils free from frost Acme recommends its CBS Series.

Series H and HBS are for flooded ammonia operation, adaptable for use particularly in the meat industries where the frost build up is rapid in either medium or low temperature rooms.

All of these Acme coolers are of sectional construction, consisting of the fan section, coil section, and base section. Fans are of the multiblade type statically and dynamically balanced, according to the manufacturer.

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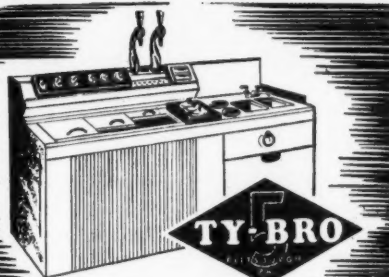
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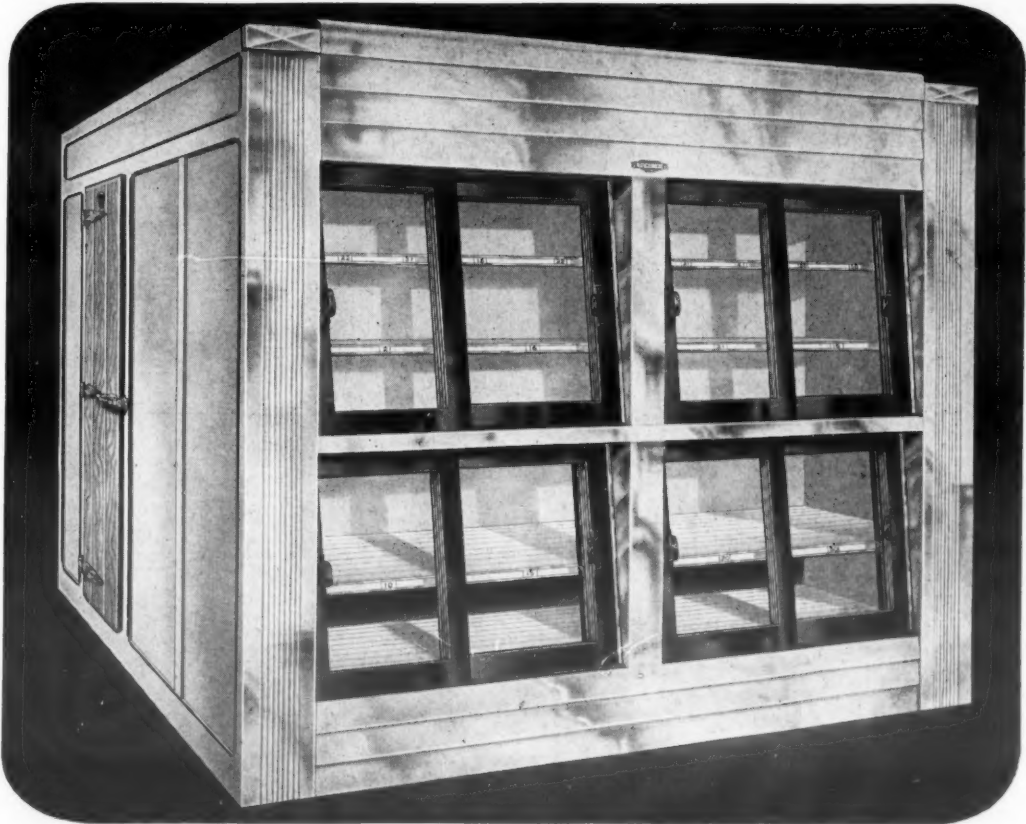
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# Refrigeration Problems

## And Their Solution

By P. B. Reed

For Service and Installation Engineers



Manager, Refrigeration and Air Conditioning Division, Perfex Corp.

### How To Use a Refrigerant Table (4)

#### SUB-COOLING THE LIQUID

The less heat that we must take out of the warm liquid ammonia to cool it down to evaporator temperature, the less of the possible cooling as represented by the latent heat, we must use to cool the liquid; consequently, the more will be left for the Net Refrigerating Effect.

This means that if the 86° liquid is cooled to say 50°, it will get to the evaporator with only:

97.9 — 48.3 = 49.6 B.t.u./lb. instead of 90.6 B.t.u./lb., so the Net Refrigerating Effect would be: 565.0 — 49.6 = 515.4 B.t.u./lb. instead of 474.4 B.t.u./lb.

Cooling the liquid before it goes into the expansion valve is often referred to as "sub-cooling" or sometimes as "pre-cooling." It is a big advantage and enables us to get more net refrigerating effect from the same equipment and with the same power.

This is especially true of low temperature systems, for cooling the

liquid the one hundred or more degrees between the condensing temperature and an evaporator temperature of -25° or -50° may represent a large percentage of the latent heat. This is particularly true of such refrigerants as the "Freons," which have low latent heats, as compared to ammonia and some of the other refrigerants.

Nevertheless, attention must be called to the fact that to sub-cool the liquid we must employ cooling. There would be no point in using some of the cooling effect of the evaporator in sub-cooling the liquid; for what we saved in sub-cooling the liquid we would lose from the evaporator, so there would be no net gain.

#### SUB-COOLING THE LIQUID WITH 'WASTE' REFRIGERATION

On the other hand, if we can sub-cool the liquid somewhat with cheap, cool water, we can make a net gain. Or we can make a net gain if we use refrigeration that would otherwise be wasted.

An example of this is a heat exchanger between the liquid and suction lines, by means of which we sub-cool the liquid in the liquid line

by means of the cooling effect of the cold vapor returning from the evaporator. This cooling effect would be lost to the room air and thus wasted, so it can profitably be used to sub-cool the liquid.

Even in this case it is not all net gain, for the heat taken from the liquid by the cool suction vapor warms this cool vapor and superheats it, reducing its density and as a result the compressor capacity and efficiency are somewhat reduced.

Careful calculation will show however, that in most instances a liquid and suction line heat exchanger does result in a net gain in capacity and efficiency.

#### HEAT CONTENT OF THE VAPOR

Now to go back to Column 9, Heat Content of the vapor in B.t.u./lb. The values in this column represent the total amount of heat in the saturated vapor, in the evaporator for example.

When the ammonia is in the saturated vapor state in the evaporator, it has in it all of the heat of the liquid (above -40°) and the latent heat of vaporization, for it took all of this heat to change it from a warm, (86°) liquid to a cold (5°) vapor. So this column is sometimes called "Total Heat."

Since the heat in the saturated vapor includes both the heat of the liquid (above 40°) and the latent heat, it should be equal to the sum of these two properties. That is, Column 9 should equal Column 8 added to Column 10. Inspection of the values of the three columns will show that this is true. For example:

At 5°, Heat of Liquid (Column 8) 48.3 B.t.u./lb. plus Latent Heat (Column 10) 565.0 B.t.u./lb., equals 613.3 B.t.u./lb. which is the Heat of Vapor as shown in Column 9.

This is true for all temperatures, although of course the negative sign for the Heat of Liquid in Column 8 must be taken into consideration for the temperatures below -40°. For example, at -50°:

$$-10.6 + 604.3 = 593.7 \text{ B.t.u./lb.}$$

TABLE 1—SATURATED AMMONIA

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Temp. °F.	Pressure Lbs./in. <sup>2</sup>	Gauge Lbs./in. <sup>2</sup>	Liquid Lb./lb.	Vapor Lb./lb.	Density Lb./ft. <sup>3</sup>	Vapor Lb./ft. <sup>3</sup>	Heat Content Btu./lb.	Latent Heat Btu./lb.	Heat of Vapor Btu./lb.	Entropy from -40° Btu./lb./°F.	Entropy from -40° Btu./lb./°F.
-60	5.55	*18.6	0.02278	44.73	43.90	0.02235	-21.2	589.6	610.8	-0.0517	1.4769
-58	5.93	*17.8	0.02282	42.05	43.82	0.02378	-19.1	590.4	609.5	-0.0464	1.4713
-56	6.33	*17.0	0.02286	39.56	43.74	0.02528	-17.0	591.2	608.2	-0.0412	1.4658
-54	6.75	*16.2	0.02291	37.24	43.65	0.02685	-14.8	592.1	606.9	-0.0360	1.4604
-52	7.20	*15.3	0.02295	35.09	43.57	0.02850	-12.7	592.9	605.6	-0.0307	1.4551
-50	7.67	*14.3	0.02299	33.08	43.50	0.03023	-10.6	593.7	604.3	-0.0256	1.4497
-48	8.16	*13.3	0.02304	31.20	43.41	0.03205	-8.5	594.4	602.9	-0.0204	1.4445
-46	8.68	*12.2	0.02308	29.45	43.33	0.03395	-6.4	595.2	601.6	-0.0153	1.4393
-44	9.23	*11.1	0.02313	27.82	43.25	0.03595	-4.3	596.0	600.3	-0.0102	1.4342
-42	9.81	*10.0	0.02317	26.29	43.16	0.03804	-2.1	596.8	599.0	-0.0051	1.4292
-40	10.41	* 8.7	0.02322	24.86	43.08	0.04022	0.0	597.6	597.6	0.0000	1.4242
-10	23.74	9.0	0.02393	11.50	41.78	0.08695	32.1	608.5	576.4	0.0738	1.3558
- 8	24.97	10.3	0.02399	10.97	41.69	0.09117	34.3	609.2	574.9	0.0786	1.3516
- 6	26.26	11.6	0.02404	10.47	41.60	0.09555	36.4	609.8	573.4	0.0833	1.3473
- 4	27.59	12.9	0.02409	9.991	41.52	0.1001	38.6	610.5	571.9	0.0880	1.3430
- 2	28.98	14.3	0.02414	9.541	41.43	0.1048	40.7	611.1	570.4	0.0928	1.3389
0	30.42	15.7	0.02419	9.116	41.34	0.1097	42.9	611.8	568.9	0.0975	1.3352
2	31.92	17.2	0.02424	8.714	41.25	0.1148	45.1	612.4	567.3	0.1022	1.3317
4	33.47	18.8	0.02430	8.333	41.16	0.1200	47.2	613.0	565.8	0.1069	1.3272
6	34.27	19.6	0.02432	8.150	41.12	0.1227	48.3	613.3	565.0	0.1092	1.3253
8	35.09	20.4	0.02435	7.971	41.07	0.1254	49.4	613.6	564.2	0.1115	1.3234
76	143.0	128.3	0.02653	2.089	37.69	0.4786	127.4	630.1	502.7	0.2664	1.2090
78	147.9	133.2	0.02661	2.021	37.59	0.4949	129.7	630.4	500.7	0.2706	1.2020
80	153.0	138.3	0.02668	1.955	37.48	0.5115	132.0	630.7	498.7	0.2749	1.1991
82	158.3	143.6	0.02675	1.892	37.38	0.5287	134.3	631.0	496.7	0.2791	1.1962
84	163.7	149.0	0.02684	1.831	37.27	0.5462	136.6	631.3	494.7	0.2833	1.1933
86	169.2	154.5	0.02691	1.772	37.16	0.5643	138.9	631.5	492.6	0.2875	1.1904
88	174.8	160.1	0.02699	1.716	37.05	0.5828	141.2	631.8	490.6	0.2917	1.1875
90	180.6	165.9	0.02707	1.661	36.95	0.6019	143.5	632.0	488.5	0.2958	1.1846
92	186.6	171.9	0.02715	1.609	36.84	0.6214	145.8	632.2	486.4	0.3000	1.1818
94	192.7	178.0	0.02723	1.559	36.73	0.6415	148.2	632.5	484.3	0.3041	1.1789

\*Inches of mercury vacuum.

Where -10.6 is the Heat of Liquid, 604.3 is the Latent Heat (of vaporization) and 593.7 is the Heat of the Vapor.

Four tables show all three of these columns. Although columns 8 and 10 are basic, most tables show only Columns 8 and 9, for they are the values most used. If needed, the Latent Heat can be easily obtained by subtracting the heat content of the liquid as shown in Column 8, from the Heat Content of the vapor as shown in Column 9, and the result is Latent Heat as shown in Column 10.

Ordinarily the Heat of the Vapor and the Heat of the Liquid can be used directly without requiring the Latent Heat values. For example, refer back to the previous example of determining the Net Refrigerating effect, with 86° liquid and 5° evaporator.

First we found the amount of heat to be removed per pound of 86° liquid to cool it to 5° liquid. This was, 138.9 — 48.3 or 90.6 B.t.u. per pound. Then we subtracted this 90.6 B.t.u./lb. from the Latent Heat of 565.0 B.t.u./lb. and this gave us 474.4 B.t.u./lb. as the Net Refrigerating Effect.

Another, and somewhat easier (and more common) method is to subtract the Heat of Liquid at 86° from the Heat of Vapor at 5° and the result is the Net Refrigerating Effect. Thus with the Heat of Vapor being 613.3 B.t.u./lb.:

$$613.3 - 138.9 = 474.4 \text{ B.t.u./lb., the Net Refrigerating Effect.}$$

#### ENTROPY COLUMNS

Columns 11 and 12 show the "entropy" values. Entropy is not, strictly speaking, a property such as Temperature (Boiling Point), Pressure, Volume, Density, Heat Content, or Latent Heat.

Entropy is a mathematical ratio that is calculated by a complicated formula, but roughly it is equal to the heat content of the liquid or the vapor divided by the absolute temperature.

Entropy has little use by the service or application engineer, but is used by design engineers, especially in compressor calculations. This will be further explained in the next part on the use of Superheat Tables.

(To Be Continued)

### Wolverine Tube Offers Movie for Meetings

DETROIT — Wolverine Tube Division of the Calumet & Hecla Consolidated Copper Co., Inc., has just announced the completion of a new, 16 mm. movie—"Quality Control—From Ore to Finished Product."

The film follows copper ore from deep in the Calumet & Hecla mines in Upper Michigan, through its fabrication as seamless, non-ferrous tubing and on to typical end applications.

The 40-minute movie is in full color and complete with sound track. It is designed for professional, engineering, and business groups.

Showings can be arranged (without obligation) by contacting Wolverine Tube Division, advertising department, 1411 Central Ave., Detroit.

### RAPID DEHYDRATOR KIT

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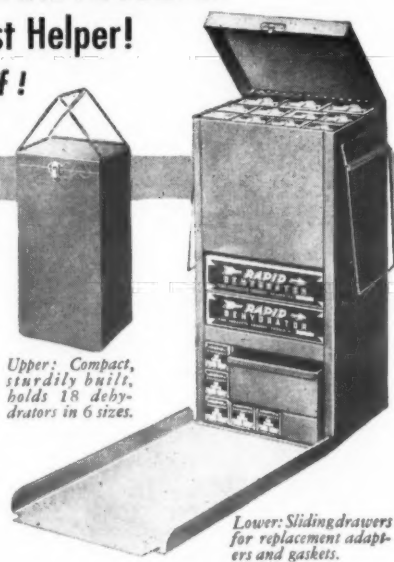
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## Manual Is Published On Mercury Switches

MINNEAPOLIS — Minneapolis-Honeywell Co. has published a manual on mercury switches setting forth details on types of switches, applications, engineering data, and other information of interest.

The illustrated booklet shows how the switches are designed and made, and how they are used for a wide number of switching operations where space requirements, dirt-free and frequent operation often make the mercury instruments better suited to control of electrical devices than other types of mechanical and electrical switches.

A chart showing the best methods of selecting switches for specific electrical applications also is included, together with tables listing complete specifications for more than 60 different types of mercury switches. The tables include information on amperage loads for A.C. and D.C. power, motor horsepower, dimensions of the various switches, tilting action and angle and similar details.

Copies are available from the Specialties Division at the main office in Minneapolis.

## Petersen Names Men For Division Offices

LOS ANGELES—Sales managers for its Midwestern, southern, and northeastern divisions were recently appointed by Petersen Showcase & Fixture Co., reports R. G. Hussong, head of soda fountain sales.

John C. Wright has been placed in charge of selling for the Midwestern division; James W. Wilson for the southern division; and Joseph Grunwald for the northeastern division.

Wright, who has had 12 years' experience in the soda fountain field, will headquarter in Chicago, the announcement said. A former manufacturer of food service equipment, Wilson will conduct his activities from Atlanta. Grunwald will maintain his contacts from offices in New York City.

In addition to working closely with present sales outlets in their respective territories, each of the divisional sales managers will supervise appointments of new dealers and distributors.

With Either a Dip or a Spray

## New Metal Cleaners Introduced Will Work On Aluminum, Solve Special Problems

PITTSBURGH—Two new metal cleaners, said to be effective individually or in combination for cleaning a wide variety of metals and alloys, are being announced by Calgon, Inc. here, following a long period of laboratory and field research and testing.

Calgon Metal Cleaner No. 21 is described as a dry granular alkaline detergent for spray-cleaning in metal-washing machines. In addition, it has proved effective when used in combination with the new Calgon Emulsion Cleaner, for immersion cleaning in dip tanks and for heavy-duty spray cleaning.

A common maintenance problem in metal cleaning—the build-up of lime scale or other deposits on pipe lines, pumps, heating coils, nozzles, and tanks as a result of water hardness—is said to be solved by Calgon Metal Cleaner No. 21 because it contains Calgon or glassy sodium phosphate. This chemical ties up water-hardness salts—principally calcium and magnesium—to prevent their deposition, it is explained.

Use of this cleaner in recommended concentration, which ranges from 1/2 to 2 ounces per gallon of water, assures the presence of sufficient Calgon to control the mineral constituents in the water supply.

Calgon Metal Cleaner No. 21, although designed primarily for cleaning of steel products or parts, is said to be well-suited for a wide variety of other metals and alloys. It effectively spray-cleans aluminum, for example, without etching its surface, chemical engineers of the company report; in long immersion or dip-type cleaning of aluminum a slight etching may occur, they add. It is said to be excellent as a pre-cleaner when the metal surface is to be phosphate-coated, or otherwise treated, as well as in applications requiring cleaning alone.

Effective temperature range for its use is wide, 140° to 180° F.

Calgon Emulsion Cleaner is described as a white, creamy emulsion of an organic solvent in a relatively small amount of water. It readily disperses when added to the cleaning bath. It is especially recommended for use in combined solution with

Calgon Metal Cleaner No. 21 for immersion cleaning or especially difficult spray-cleaning. This mixture or combination of the two cleaners is said to provide the advantages of an alkaline cleaner with those of an organic solvent.

The organic solvent, by reducing the viscosity of heavy oil, aids emulsification. The combined cleaners are reported extremely effective for saponification of fats, deflocculation or dispersion of dirt, and emulsification of oils and greases.

Calgon Emulsion Cleaner, when used alone or in combination with an alkaline cleaner, is said to be easily rinsed from the metal surface with either hot or cold water, leaving no solvent or other film. This is said to distinguish this cleaner from most other emulsion cleaners, and is particularly important when the cleaning is to be followed by certain types of treatment, such as electroplating.

Recommended concentration of Calgon Emulsion Cleaner is 1 ounce per gallon for spray cleaning, and 1 to 2 ounces per gallon for immersion cleaning. Temperature range recommended is 140° to 160° F. Temperatures much above 160° F., it is pointed out, may result in loss of solvent from the emulsion.

Calgon Emulsion Cleaner is reported to be neutral in pH, and non-corrosive. Both new cleaners are without known harmful physiological effect.

## Wagner Quality Motors help Build Patronage...

Operators of fashionable shops are quick to realize how well the installation of an air conditioning system can build patronage for their establishment. At Sak's 5th Avenue, in Beverly Hills, customers relax and shop in cool comfort—thanks to the efficient air conditioning system pictured above.

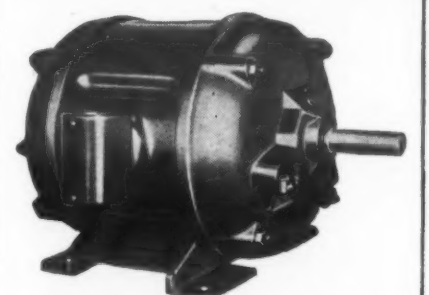
Air conditioning engineers specified, and used, Wagner Motors in this installation... as in thousands of industrial, commercial and home applications... because of their unfailing dependability! Dependable continuity of operation, outstanding service and economy are qualities found in every

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The motor illustrated above is typical of the Wagner complete line of polyphase and single-phase motors.

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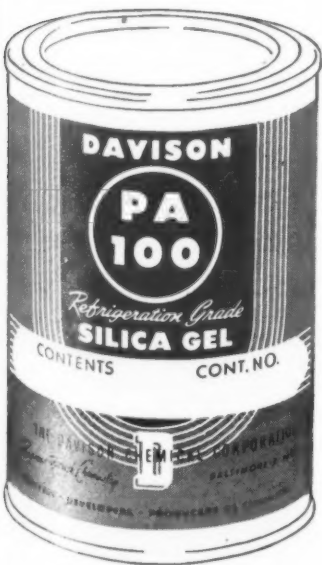


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## Self-Service Meats Build Store Traffic & Should Make Money, Operator Believes

CHICAGO—"We have had bugs of all varieties in getting set up to sell meat on a self-service basis, but we have been forced to realize that most of the difficulties of self-service meats are not new—they just look new."

"They look new because we are now seeing the meat department from the consumer side of the counter, which we have never been able to do before."

So remarked W. C. Metzger, vice president of Red Owl Stores, Inc., a large chain of markets with headquarters in Minneapolis, in addressing the Super Market Institute's symposium on self-service meats held during the market operators' eleventh annual convention at the Stevens hotel here.

"Self-service meat operations build confidence in food stores," he asserted. "We believe in the future of 100% self-service meats, also."

"There are two major considerations facing the operator who is wondering about installing 100% self-service meats."

"The first is—Does it build traffic? The answer is definitely 'yes.'"

"The second—Does it make more money? We think it will."

In his talk, Metzger outlined the experiences the Red Owl chain has had in two of its stores where self-service has been instituted for meats.

"Our equipment extends across the rear of the store, although self-service meat counters can be located anywhere in the store. The meat

department no longer has to be located adjacent to coolers and work rooms, any more than the produce department does.

"We have selected the rear position because we use the glassed in processing and packaging room, (a stage, if you please), to attract customers' attention to the new type operation. When self-service meat has been accepted, this feature can be eliminated, thereby reducing investment and operating costs."

"The cutting room differs little from the conventional meat market but must be streamlined to allow a systematic flow from the cooler to the wrapping bench for the greatest amount of economy."

"The wrapping bench is situated so that packagers face the customer. The setup of this bench is extremely important and no one should attempt self-service meat operation until this fixture is carefully planned."

"Our self-service meat department contains 53 ft. of open-type, endless case with one low temperature case for frozen poultry, fish and seafoods. We believe this to be the minimum of feet of display needed, as it is found that sales have a definite relation to the amount of space given to a product."

"The yield has amounted to from \$78.80 per foot to \$91.50. Our objective is \$120 per lineal foot of case," Metzger said.

### Desirable Temperatures

"We find an inside case temperature of 28° to 32° F. desirable. Using the correct type of cellophane keeps fresh meat in fresh condition at least 48 hours; some items, 72 hours."

"Location of heating units, air conditioning, or any type of fan should be considered when placing the open style equipment."

"What does self-service meat equipment cost? This is an important question. We need more display cases and more work room."

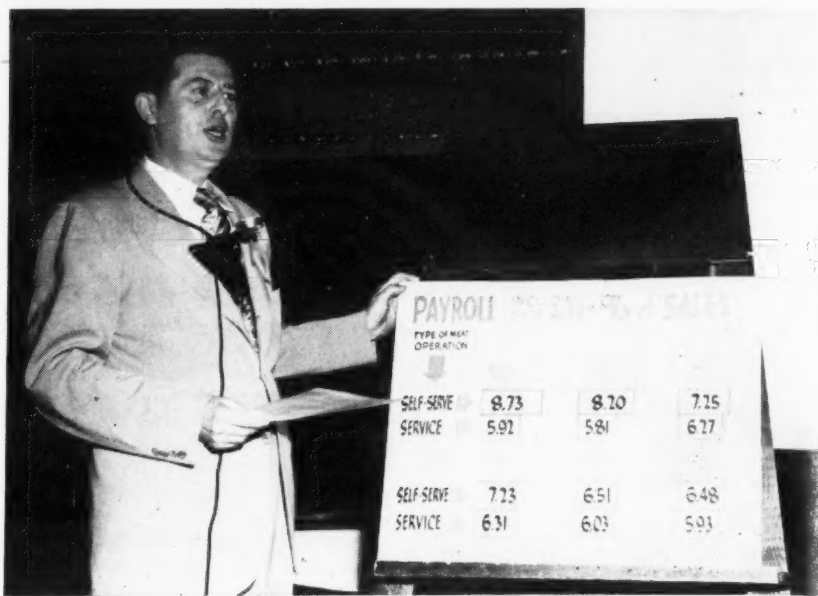
"An air conditioned cutting room is very desirable. We think it's essential. This means more investment in equipment, more valuable space, higher electricity cost, more repair expense, and probably earlier replacement of mechanical equipment."

"You must weigh carefully these additional costs against the advantages of self-service meats."

"In viewing this operation you quickly notice more people than in the conventional market. Pre-packaging requires more man hours and you must plan for lower cost help. Two or three meat cutters do the cutting, trimming, and grinding and keep the workroom clean and orderly."

All other operations are performed by the wrapping girls, except that we provide a well-trained hostess who maintains the displays and assists customers. The hostess is the only contact between the customer and the meat department."

## Costs Compared Between Self-Serve & Service



A six-month comparison of the payroll costs of self-serve pre-packaged meats with the conventional service setup showed the latter still slightly lower in cost, W. C. Metzger, market operator, told the Super Market Institute.

"I am not divulging trade secrets when I mention that in the past the butchers, in some cases, would not win any popularity contests for courtesy, cleanliness, honesty, or even helpfulness. Many of our skilled meat-cutters are not good salesmen. We have not only eliminated the 'Butcher's Thumb' but we have eliminated the butcher as a salesman."

"Most of us have experienced the loss of meat business coincidental with the loss of an exceptional meat department operator. It is gratifying to know that in complete self-service meats the business belongs to Red Owl and not to a single individual."

"An interesting sidelight of our Hopkins store operation is the use of five deaf-mute girls in our pre-packaging department. It is too soon to judge the results, but indications are greater speed and better packaging."

"Our time and motion studies have taken much of the guess out of the meat business. Every function is done according to our own specifications. Constant records are kept of yield, waste, packaging costs, and tonnage of all items."

"We know the hourly production of each individual and because the work is mechanical we can make greater demands. Under this plan we find more care is exercised in such practices as receiving merchandise, trimming, and weighing," commented Metzger.

"Packaging meats is really the greatest single difference between service and self-service operation. For one thing, a greater variety of meat is now handled—more than 200 labels, for example, are used by us. And get this point—pre-packaged meats increase the sale of many meats, poultry, luncheon meats, and many other profitable items."

"We have learned that our customers are better judges of what they want than we are, or their own butcher can ever hope to be. No longer do we have the problem of

selling little or no lamb, poultry, fancy meats, beef or any other item because the meat department operator doesn't like handling that product or thinks it won't sell."

"The mechanics of packaging meat are simple but require close observation by the hostess and department head. Properly wrapped and sealed, we find the packages stand the 'pawing over' from customers. Few packages are returned for re-wrapping. Each package is code marked to control age, but frequent checking is most important."

### Weighing More Accurate

"Weighing is far more accurate than in service markets and each price ticket shows weight, and the amount. The customer gets exactly what she pays for and Red Owl gets the full profit return."

"Special equipment is necessary for the handling of price tags, cellophane, and other supplies. Price tags are received in bundles of 1,000 of each variety and by a count and recount plan we are able to watch closely the daily movement of all items."

"Because of the many sizes and kinds of wrapping material, we find each store carrying a much greater investment in supplies. This situation should be improved with further experience and availability of such material."

"Consumer acceptance of self-service meat may best be judged by our experience. Our service markets do 27.3% of total store sales. Our self-service markets began with 23% and now do 30% or more of store sales. We feel this is positive evidence of the customers' preference for self-service meats."

"Recently we asked 50 women who had already made their meat purchases two questions:

"One was, 'How do you like this method of buying?' With one exception the response was 'I like it; I can see what I want. I do not have to

(Concluded on next page)

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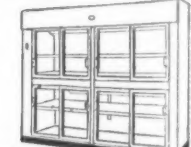
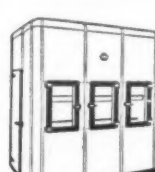
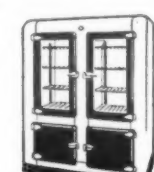
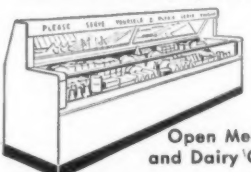
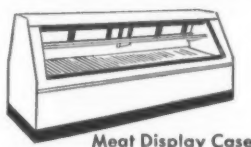
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### 3-In-1 Cabinet Makes Bow at Institute



One of the newest pieces of refrigeration equipment shown at the exhibit held in conjunction with the eleventh annual meeting of the Super Market Institute in Chicago was this three-in-one Frez-O-Mat cabinet which Milton Rifkin is showing to market operators. Top of superstructure contains the patented Frez-O-Mat automatic dispensers for individual frozen food packages. In the bottom part is a storage compartment. Between this and the top is another section fitted with small, sliding glass doors for self-service operation in such things as ice cream, pre-packaged meats (frozen), etc. It will be on the market in a few months, Rifkin said.

### Is Butcher Missed?

(Concluded from preceding page)

take more than I need.' The exception said, 'I like to see the meat cut.' 'The other question was, 'Do you miss the butcher?'—The answer an emphatic 'No.'

This is further evidence of the customers' preference for self-service meat," Metzger said.

Figures on the costs of labor and materials for self-service as opposed to service meat departments were also given by Metzger. He revealed that last November these combined

costs for self-service amounted to 10.47% of the sales, compared to 6.86% cost of labor and materials for service meats.

By April of this year the self-service figures had been slashed to 8.04%, with the service figure standing at 6.87%.

He also mentioned that the meat cutter can average 67 lbs. an hour in cutting meat for self-service, while the hostess and wrapping girls can wrap 37 lbs. per hour, on the average.

Some 9,500 and 11,000 packages a week are prepared, and the cost has never run less than 4.1 cents per package, but never more than 5 cents. Average cost of labor and

material, Metzger said, worked out to 4.13 cents per package.

"I have spoken only of complete self-service meat departments. A three-year test in our Austin, Minn. store shows partial self-service to be profitable.

"Eleven of the 50 ft. of meat counter are self-service. The self-serve case returns \$101 per lineal foot per week against \$75 in the service cases. This is true with fresh meat as well as other meat products. We will make more partial installations, especially in stores where heat sales are below \$3,000 per week.

"To summarize briefly, we hesitate to proceed full speed ahead. Self-service meat does require more investment. We have not yet put our cost to sell in line with our conventional markets. New developments of packaging and equipment manufacturers and the possibility of central cutting and packaging operations justify some delay.

"Yet, we do see these encouraging factors in self-service meats:

"1. We have, to a large extent, taken the guess out of the retail meat operation. From carefully kept records we know selling costs in advance and the yield on the merchandise we sell.

"2. The low gross profit developed by the need for careful trimming and making cuts acceptable to our customers is offset by the greater proportion of profitable merchandise sold and by the elimination of almost all spoilage.

"3. Our displays are ready a few minutes after the store opens in the morning and are complete until closing at night.

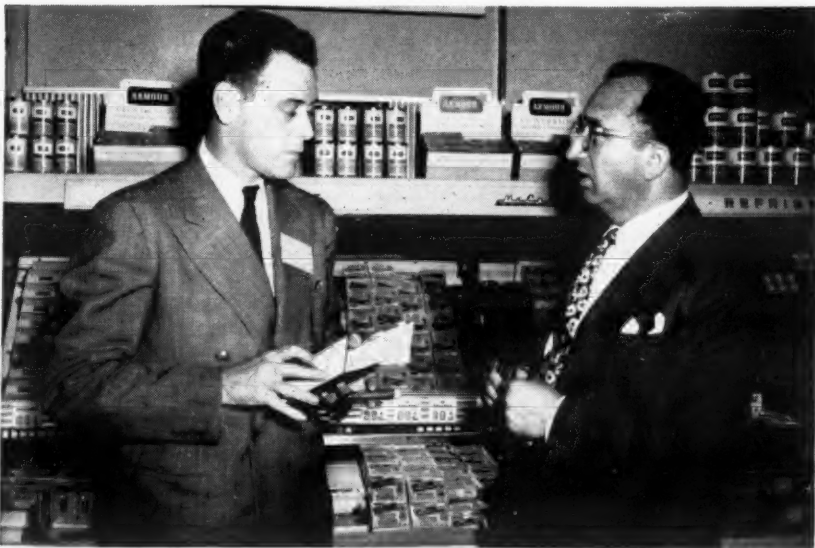
"4. We maintain higher standards of cleanliness and sanitation.

"5. We eliminate one of the two bottlenecks within the supermarket, the meat counter. However, we still have the check-out.

"6. The store manager and supervisor not always well trained in the mechanics of the meat business are able to perform more effectively.

"7. We give the people what they want at no additional cost to them."

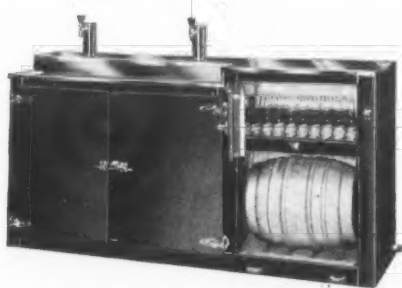
### Deep Display Marks New McCray Open Case



R. E. Abbott (left), sales manager of McCray Refrigerator Co., quotes some facts and figures on a new McCray GH-10 open, refrigerated case which McCray has introduced. Among its features are a 42-in. deep display section, said to be wider than many such cases.

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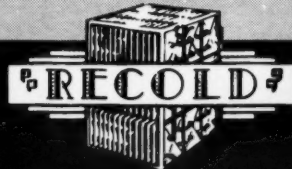
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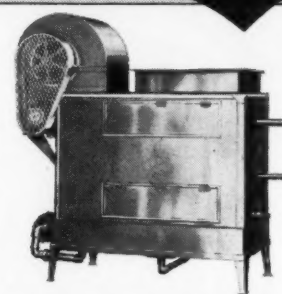
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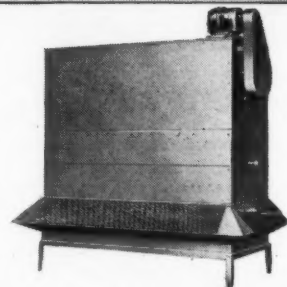


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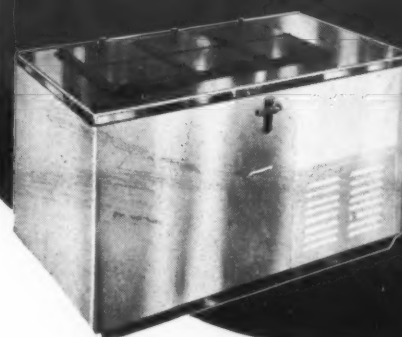
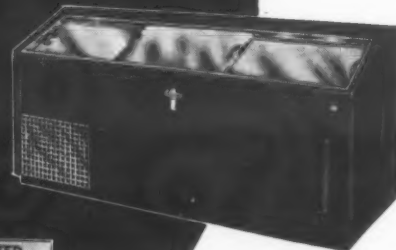
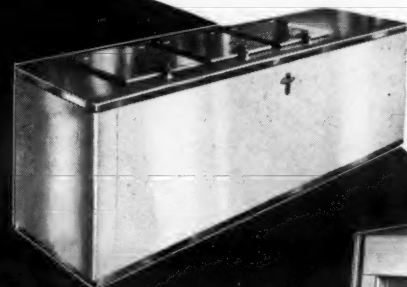
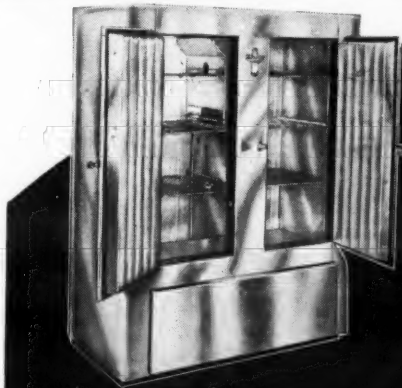
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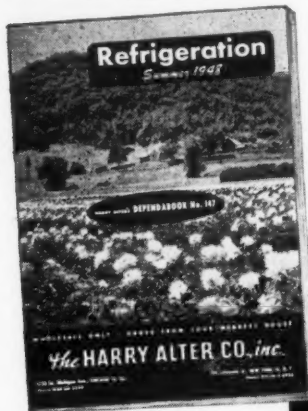
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**Promote Together for Profit**

## Philadelphia Shows the Way In Cooperative Promotion On Commercial Refrigeration and Air Conditioning

PHILADELPHIA—A campaign to tell the "Air Conditioning and Refrigeration Story" to some 17,000 commercial prospects in this territory is currently being conducted by the Electrical Association of Philadelphia.

**Purpose:** to expand the use of commercial air conditioning and refrigeration equipment as well as stimulate replacement of worn-out items.

**Method:** a direct-mail campaign operated by two separate divisions of the EAP for maximum effectiveness. The Association's Commercial Electric Refrigeration Group goes after its list of 9,000 prospective customers by sending out a folder headed: "Don't Look Now . . . But Your Profits Are Leaking!"

Key-point of this broad-side is the replacement angle.

"Modern businessmen no longer doubt the wisdom of having dependable electric refrigeration for the protection of perishable goods," reads the brochure. "Unfortunately, though, once their equipment has been installed, many of these men are satisfied to 'let well enough alone' as long as their old equipment keeps operating. That's when profits begin to shrink."

### CITE REPLACEMENT COSTS

After making the point that worn-out refrigeration parts are inefficient and thus cost the businessman more

to operate, the folder observes that profits are likewise lost when business is not expanded for lack of modern equipment.

EAP clinches the argument by listing 10 local firms who can meet the user's need for either replacement parts or additional commercial refrigeration equipment with any of 12 different brands. Those local distributors included on the back of the brochure are:

Judson C. Burns; Elliott-Lewis Co., Inc.; S. S. Fretz, Jr., Inc.; Irac Corp.; Mack Machine Co. of Pennsylvania, Inc.; Peirce-Phelps, Inc.; J. J. Pocock, Inc.; Raymond Rosen & Co., Inc.; Trilling & Montague; and Willard Sales & Service, Inc.

Attached to the pamphlet is a postage-free card addressed to EAP, encouraging customer queries about profitable operation of refrigeration equipment.

Under the chairmanship of C. C. Strauch of York Corp. the Air Conditioning and Industrial Refrigeration Division of the EAP has been conducting a similar campaign to sell 8,000 prospects on air conditioning their places of business.

### 4-PIECE COOLING CAMPAIGN

This group has worked up a series of four direct-mail pieces to do the job of creating a desire for air conditioning in Philadelphia county and four others in this area. Members of the Committee are: Wirt Scott, Philadelphia Electric Co.; W. R. Funk, Willard Sales & Service; and H. G. McCullough, S. S. Fretz Jr., Inc.

The initial EAP pamphlet has "blanket appeal" in that it discusses how various establishments (restaurants, offices, hotels, apartments, food stores, clothing stores, and factories) can use air conditioning to advantage.

As the second step in its mail promotion the EAP sends out a brochure that explains the "facts" on performance, installation, and maintenance, realizing that many air conditioning sales are lost when the prospects do not receive sufficient information about the product.

The two succeeding folders in the

series point out eight distinct advantages of air conditioning for the commercial-industrial user. As stressed in the EAP Campaign, they are: ventilation, air cleaning, air circulation, noise elimination, heating, humidification, cooling, and dehumidification.

All copy underscores the "increased profits" angle and winds up by urging the prospect to query EAP with an attached postage-free card. The back page of each mailing piece carries a list of 15 local firms who offer a total of 10 different makes of air conditioning equipment. "The application of their knowledge and experience to your business can lead to new operating economies," the bulletin reminds prospects.

Those air conditioning firms included in the list are: Carrier Corp.; John A. Connelly Co.; Elliott-Lewis Co., Inc.; S. S. Fretz, Jr., Inc.; General Electric Co.; Irac Corp.; George C. Lewis Co.; Mack Machine Co. of Pennsylvania, Inc.; Peirce-Phelps, Inc.; Philco Distributors, Inc.; J. J. Pocock, Inc.; Sturtevant Div., Westinghouse Electric Corp.; Trilling & Montague; Willard Sales & Service, Inc.; and York Corp.

Strong support for the drive to win air conditioning sales in this section is being given by the Philadelphia Electric Co., local utility. At a recent meeting of the Air Conditioning Division of the EAP, J. Frank Gaskill, sales manager for the utility, outlined his company's efforts in the campaign before a gathering of over 200 men who comprise the sales staffs of firms participating in the promotion.

Following Gaskill's talk Strauch spoke on "Why Customers Buy Air Conditioning Equipment" and supported his statements with facts and figures on market possibilities.

### Must Still Be Shortages

ROCHESTER, N. Y.—John Penafather, manager of the Carrier Corp. offices here, reported to police the theft of six refrigerator valves from the Case Hoyt Warehouse. He valued the valves at \$150.

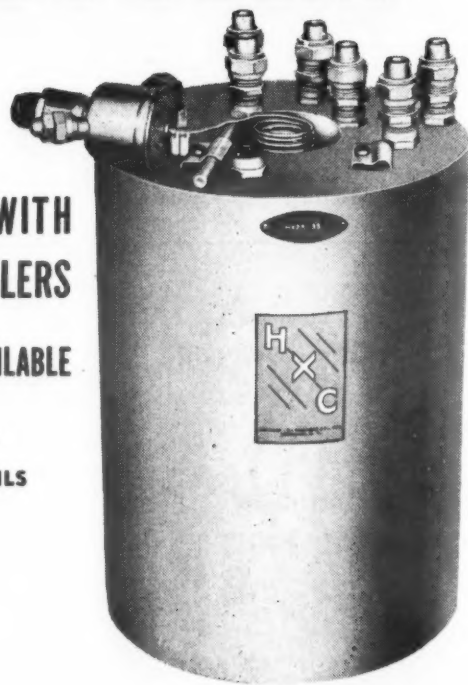
## HEAT-X-CHANGER BEER COOLERS



**MODELS FOR USE WITH  
OR WITHOUT PRE-COOLERS**

**UP TO 4 BEER CIRCUITS AVAILABLE**

**NO FREEZE-UP DAMAGE  
STAINLESS STEEL BEER COILS  
SIMPLE TO INSTALL  
HIGHLY EFFICIENT**



**SEPARATE BEER, WATER AND REFRIGERANT COILS CAST IN AN ALUMINUM BLOCK**

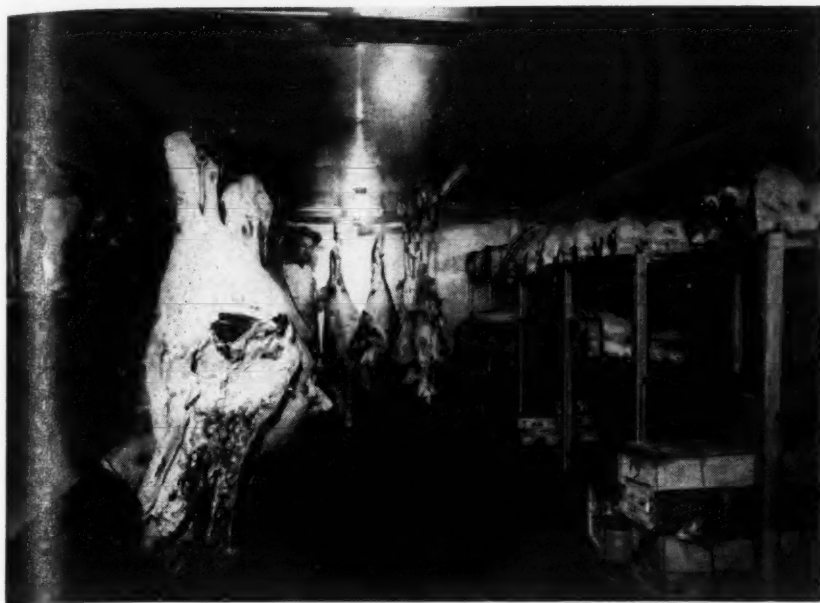
● No accessories such as surge drums, oil separators etc., are needed. No chance for beer to lose its carbonation, or to become contaminated.

The aluminum block provides cleanliness, sanitation, and exchange of heat between copper water coil, stainless steel beer coils and copper refrigerant coil. Coils cannot expand and become damaged in event of freezing.

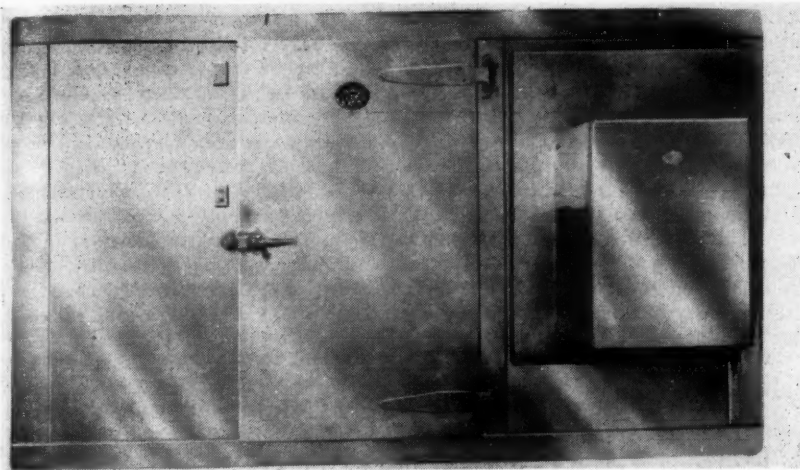
**THE HEAT-X-CHANGER CO., INC.**  
415 Lexington Avenue, New York 17, N. Y. Brewster, N. Y.



## Pre-Fab Cooler Erected with Socket Wrench



Circular track facilitates handling of meat in storage.



Wide door on meat cooler permits man to enter easily even though he may have carcass slung over shoulder.

## Twin-Unit Thermostat Settings In Meat Cooler Keyed So That One Protects Other In Emergency

PHILADELPHIA — A pre-fabricated meat cooler equipped with extra thick insulation and two complete refrigeration systems has been installed in the municipal market here for Garrity & Switkin, meat wholesalers.

Constructed by the Reco Products division of Refrigeration Engineering Corp., the cooler is a sectional, aluminum clad Reco-Fab unit that was assembled at the site of installation with the aid of a socket wrench only.

The cooler measures 12 ft. 1 in. by 26 ft. 5 in. and is fitted with a circular track to handle carcasses.

Two ¾-hp. Reco-Pak packaged refrigeration systems are used. These systems include a blower coil and condensing unit mounted on an insulated panel and fit into the side walls.

Because the cooler is insulated with 6 in. of Fiberglas, the refrigeration load is exceptionally small and normally only one unit is needed to

maintain the 38° F. required. However, the second unit, with its thermostat set a few degrees higher than that of the first, operates on exceptionally warm days or when an unusually large number of carcasses is placed in the cooler.

Through utilizing the heavily insulated walls and the two refrigeration systems, the company believes it has greatly reduced the operating cost of the equipment.

In addition, the firm is assured of sufficient refrigeration from either one of the units in case the other breaks down.

Since the walls are of the same thickness as those designed for zero storage, part of the cooler can be partitioned off and used for that purpose.

As a fair portion of the meat handled by Garrity and Switkin is in the form of carcasses, the cooler was equipped with an extra wide door that will permit a man with a carcass on his shoulder to enter easily.

## Smallwood Is Vice Pres. At Perrin-Turner Ltd.

TORONTO, Ont., Canada—Walter Smallwood, former manager of Canadian General Electric Co.'s air conditioning division, has been elected vice president and general sales manager of Perrin-Turner Ltd. here, John V. Turner, president, announced.

In his new position, Smallwood will set up a national dealer organization for the distribution of Servel-Schnacke commercial condensing units and allied products. Also, he plans an extensive investigation of the export possibilities from the Canadian factory of Perrin-Turner.

(In addition to being national distributor for Servel-Schnacke commercial units in Canada, Perrin-Turner sells ammonia equipment and operates an extensive refrigeration service business from its new plant in Toronto.)

Smallwood was associated successively with Southern California Edison Co. in Los Angeles, Niagara & Hudson Power Corp., Frigidaire, Norge, and, for the past 12 years, Canadian General Electric.

Besides holding positions as sales engineer and service manager, he taught night extension courses in refrigeration, heating, and air conditioning for the Toronto board of education for eight years.

## Commercial Firm Multiplies Volume 14 Times In 10 Years

JACKSONVILLE, Fla. — Florida Weathermakers, Inc., air conditioning and refrigeration firm here, observed the tenth anniversary of its founding recently.

President Vernon Kelley traced the growth of the firm from 20 installations in its first year of operation to 282 last year. Installations made so far this year are well ahead of last.

Kelley recalled that his first job was to install a ¾-hp. unit in a doctor's office. One of his largest contracts was a \$360,000 installation at Camp Blanding.

## 24% Oil Burner Shipment Drop Continues 4-Month Decline

WASHINGTON, D. C.—March factory shipments of oil burners reached 19,000 units, according to the Census Bureau. This is a 24% decrease from the 25,000 February total, and continues the decline which started last November.

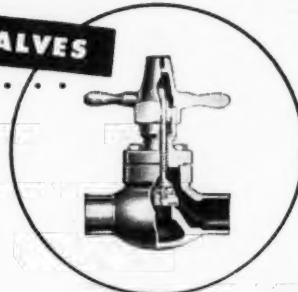
The March total is equal to only about one-fifth of the number of units shipped in March of '47.

Unfilled orders at the end of March were given as 124,000 units, representing a decline of 8% since February and a decline of 88% from March of last year.

**C**ustomer goodwill, your most priceless asset, is always enhanced when you specify and use a Henry Product.

### WING CAP VALVES

Equipped with patented, self-aligning stem disc which does not rotate on seat. Resilient packing. Valves are back seating and can be repacked under pressure. Inverted wing cap operates valve. Unrestricted flow. Bronze alloy bodies, ¾" to 4½" O.D.S. Semi-steel bodies with adapters for soldering or brazing to copper pipe—1½" to 5½" O.D.S.



Sold by leading wholesalers

## HENRY VALVE COMPANY

Control Devices, Valves, Driers, Strainers and Accessories for Refrigeration and Air Conditioning and Industrial Applications.

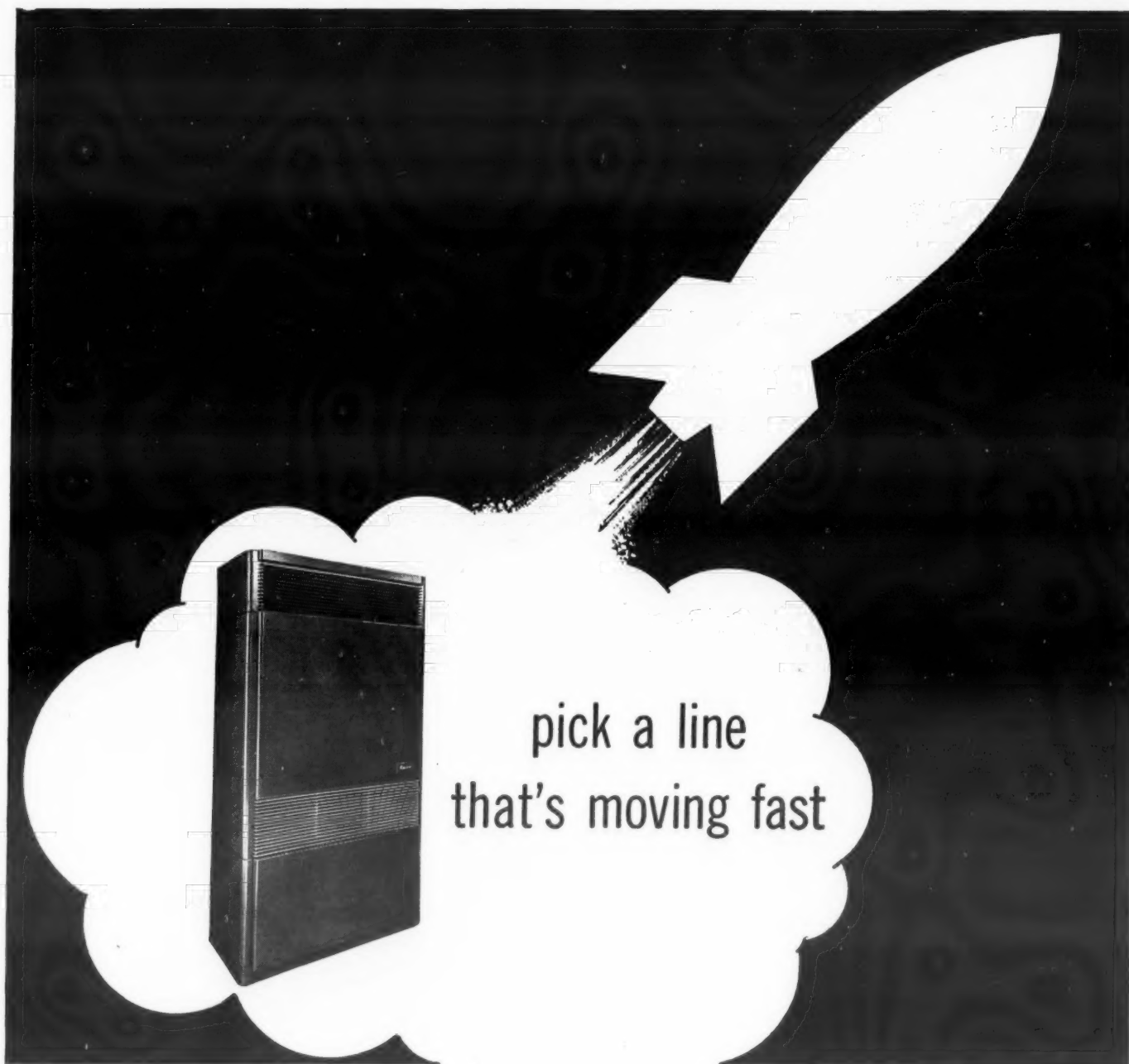
3260 W. Grand Ave., Chicago 51, Ill. • Cable: HEVALCO Chicago



## THE MASTER SERVICE MANUALS - - -

— — — and other books of the Refrigeration Library are depended upon as textbooks in trade schools from coast to coast.

BUSINESS NEWS PUBLISHING CO., DETROIT



The Carrier Weathermaker is really going places. And dealers handling this efficient, economical packaged air conditioner are enjoying brisk, profitable sales.

It's easy to understand. Every shop on Main Street is a prospect. Drug and clothing stores, barber shops, restaurants, bowling alleys and others are installing self-contained units to attract more customers.

And more and more of them are choosing a unit of proved dependability — a Carrier Weathermaker.

Right now Carrier has associate dealerships open in attractive territories. Your town may be one of them. Why not get in touch with the nearest Carrier major dealer, or write direct to Syracuse, N. Y., for full details?

With the Carrier line, you can

offer the choice of two skillfully engineered, handsomely styled packaged units. They're designed to provide ample cooling for the average and larger-sized store, regardless of outdoor heat and humidity. Buyers everywhere accept the Carrier name as a guide to satisfaction in air conditioning. That's money in the bank for the Carrier associate dealer. Carrier Corporation, Syracuse, N. Y.

**Carrier**

AIR CONDITIONING • REFRIGERATION • INDUSTRIAL HEATING



## Maryland Group Gets NARC Membership



Above is the formal presentation of the NARC certificate of membership to the Maryland Association of Refrigeration Contractors, Inc. From l. to r. are Reese Nuckols, director; Harry W. Goodhart, secretary; Jack Frazier, sergeant-at-arms; Jack B. Ottenheimer, president; Aaron M. Aaron, treasurer; Kenneth C. Milford, vice president; Ralph Lampie, director, NARC; and Joe Helminak, vice president, NARC.

## Prize To Reward Progress In Gas Air Conditioning

NEW YORK CITY—L. L. Ladewig, chairman of the All-Year Gas Air Conditioning Committee of the American Gas Association, has announced the first annual A.G.A. Progress Award for Gas Summer Air Conditioning.

The first award which will be made at the American Gas Association convention, Oct. 4-8, at Atlantic City, will be based on progress made in gas summer air conditioning during 1947.

Donor of awards is Servel, Inc. The awards will be the A.G.A. Gas Summer Air Conditioning Progress Trophy and \$1,000 in cash to the winning company. Miniatures of the trophy will be presented to the individuals in the company whose efforts made the award possible.

All gas utility companies holding membership in the association will be eligible for entry. Entries for the 1947 award must be in the hands of A.G.A. by Aug. 1.

"This program is designed," Ladewig said, "to give recognition for outstanding achievement in the advancement of this important phase of the gas industry and to bring to light new ideas and new methods."

## Revised New Orleans Code Urged by ASHVE Chapter

NEW ORLEANS—Recommendations for a new city code covering air conditioning, heating, and ventilation were drawn up by the Delta Chapter of the American Society of Heating & Ventilating Engineers at its annual meeting in the New Orleans Athletic Club.

L. V. Busenlener, who was elected president of the chapter at the meeting, said the recommendations were made "so that more safety measures will be put into practice and offer better protection to the public." No further details were announced.

In addition to Busenlener, these other officers were elected: Ross Guest, vice president; James Adair, treasurer; and Ralph Elizardi, secretary. Fritz Gutknecht and Ted Offner were elected to the board of governors, which also includes the officers and John Burke, retiring president.

## Clothier Puts Air Cooling First on 'Expansion' Agenda

KANSAS CITY, Mo.—One of the first things done by Woolf Brothers, leading clothing store, when the firm acquired additional retail space in the building north of their present quarters at Eleventh and Walnut Sts., was to install air conditioning.

The Hewson building, a six-story and basement structure, has been leased by Woolf Brothers here, and when a million dollar expansion program is completed, a 50% increase in selling space will be available.

## Packaged Units To Air Condition Hotel



Stuart field engineering staff outside quarters of the distributorship established in 1947.

## Typhoon Distributor Adds Hotel Belfort to Long List of Miami Installations Made In Past 10 Months

MIAMI, Fla.—Hotel Belfort on Northeast 2nd St. is being air conditioned completely with self-contained Typhoon units, and Stuart Cooling Corp., Typhoon distributor doing the installing, believes it will be the first hotel installation of this kind in the area.

The Belfort lobby will have controlled conditions supplied by a 3-ton Typhoon console unit; the first floor will be conditioned with a 5-ton unit, and the 2nd through 7th floors with a 7-ton unit.

A central cooling tower will be used to keep the operating expense at a minimum.

Each of the self-contained units will be equipped with an electric resistant type tempering coil to augment the existing hot water heating system.

Stuart Cooling Corp. was organized in August, 1947, and since that time has more than doubled the number of Typhoon installations in the Miami area. Armand Cowan is president and sales manager of the organization. He was formerly with Armo Cooling Co. of New York and the York Corp. factory branch in Brooklyn. Herbert D. Fink, secretary and chief engineer, was formerly with Maurice H. Connell and Associates, consulting engineers.

## Kansas City Dept. Store, Cafe, Grocer, Auto Agency To Aid Sales with Comfort Cooling

KANSAS CITY, Mo.—Four large stores here, representing as many types of business, have completed the installation of commercial air conditioning equipment or are now adding it. A downtown department store, the newest unit of a chain grocery firm, a first-class restaurant, and a new motor car agency are keeping pace with modern ideas in public service with temperature control of their establishments.

Nance's cafeteria in the downtown B. M. A. building, has completed installing a 15-ton Carrier unit, by the Temperature Engineering Corp., local sales and service company representing Carrier equipment.

The Kroger Co., multiple unit retail grocery has opened a new store in North Kansas City, equipped with air conditioning for the comfort and convenience of their customers.

Air conditioning of the enlarged John Taylor's, downtown department store, is in the plans for this new addition to Macy-owned firms. Construction work is now in progress on a major addition to the present structure, which will enlarge the present facilities and make room for several new divisions and a basement salesroom. When completed early in 1949, the entire store will be air cooled. Kivett & Myers are the architects,

handling the layout of the store. Richard G. Roth is president of John Taylor's.

J. Gaylord Nelson, local motor car dealer, will take possession of a two-story warehouse building at 46th St. terrace and Wyandotte St. about June 1, for the operation of an as-yet-unannounced motor car agency. The structure has been built for motor car use, so a minimum of remodeling is planned. Office and display room areas will be air conditioned. Edward W. Tanner & Associates are in charge of the alterations necessary.

## West Coast Trio Forms Cheviot

LOS ANGELES—Cheviot Heating & Air Conditioning, Inc. has been formed in Los Angeles County, with 2,500 shares of no par value capital stock. Principals are: Frieda Volk, Edward Volk, and Mickey Katz.

## Drugstore To Get Cooling

ALBANY, N. Y.—Walgreen Drugs has taken a long-term lease on property at the corner of State and Pearl Sts. here and will spend approximately \$400,000 in converting it into a super-drugstore which will be completely air conditioned.



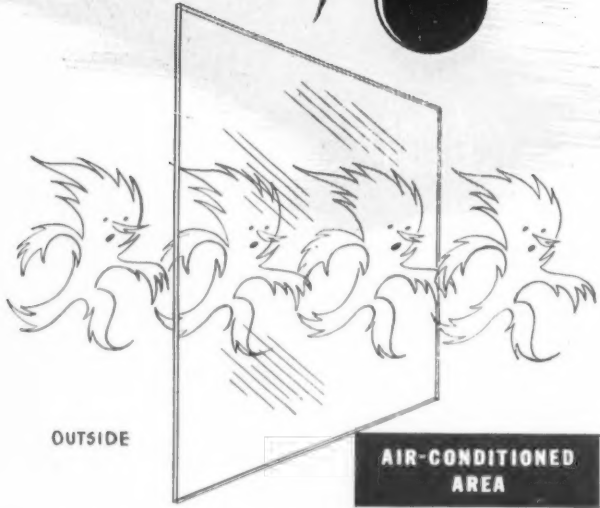
## Thermopane

## TAKES A LOAD OFF YOUR EQUIPMENT

...and a load off your mind, too! Windows glazed with *Thermopane*\*, the insulating windowpane, perform a valuable service where air conditioning is installed. *Thermopane* handcuffs outside heat...permits economic and accurate control of air-conditioning equipment.

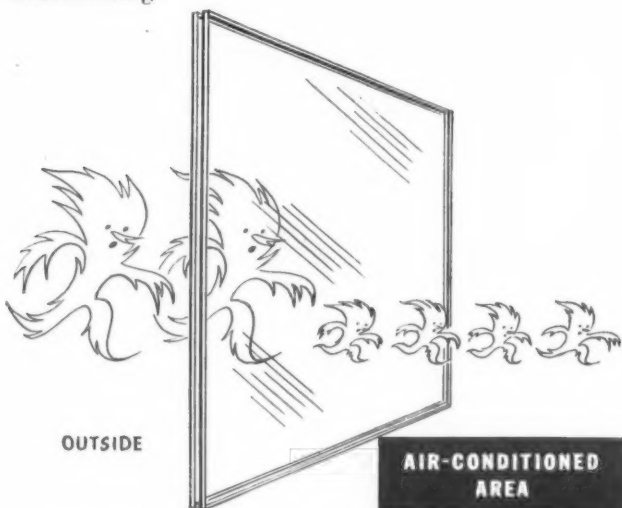
*Thermopane* consists of two or more panes of glass with dehydrated air between and factory-fabricated into a unit with L-O-F's *Bondermetic* (metal-to-glass) Seal\*.

Here's how *Thermopane* works to aid air conditioning:



OUTSIDE

AIR-CONDITIONED AREA



OUTSIDE

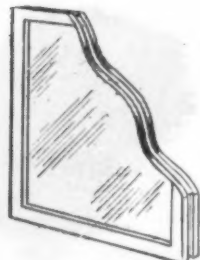
AIR-CONDITIONED AREA

Convected summer heat passes through single  $\frac{1}{4}$ " glass at the rate of 1.06 BTUs per square foot, hour, degree of temperature. This value is based on conditions of 95° outdoors and 75° indoors with an outside air velocity of 15 MPH and inside air velocity due to natural convection. It costs money and places an extra load on equipment to offset this heat entrance into air-conditioned areas. *Thermopane* with  $\frac{1}{4}$ " air space cuts this convected summer heat load to only .61 BTUs.

The percentage of sun and sky energy transferred through

*Thermopane* is approximately 10% less than that passing through single glass. To installers of air-conditioning systems that means more economical performance of equipment which benefits building management and home owners. *Thermopane* is ready for prompt delivery in more than 60 standard sizes, and even in units of special dimension. You can obtain helpful information on this glass insulating unit by writing for Don Graf's Technical Sheets on *Thermopane*. Libbey-Owens-Ford Glass Company, 1768 Nicholas Building, Toledo 3, Ohio.

®



Cutaway view of double *Thermopane* showing insulating air space and *Bondermetic* Seal.

ONLY LIBBEY-OWENS-FORD MAKES

*Thermopane*



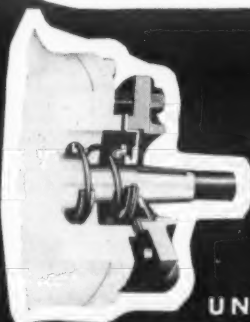
LIBBEY-OWENS-FORD  
a Great Name in GLASS

## "SEALING WITH CERTAINTY"

with

## ROTARY SEAL

"The original, time-tested, precision built replacement units"



UNIT NO. 14222



2020 NORTH LARRABEE ST. • CHICAGO, 14, ILLINOIS, U.S.A.  
CANADIAN AGENT: 2025 ADDINGTON AVENUE • MONTREAL, 28, QUEBEC, CANADA

Simplicity in construction...  
Simplicity in installation...

See your jobber!

• Every time you install a ROTARY SEAL you do it with the knowledge that the job will be completely satisfactory in every respect. No guess work. No doubt. The name ROTARY is guarantee of operating perfection. Available for over 848 models as listed on our stock sheet.

SLUDGE  
If water is  
sludge dep  
length of t  
... sulfur  
"Freon-12"  
sion prod  
sludge, the  
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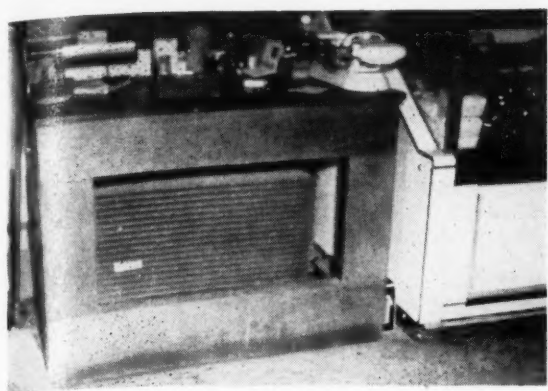
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SEND FO  
"SLUDGE"  
by Ansl  
Research St  
A detailed  
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frigerati  
sludge probl

AN  
DISTRIBUTOR



## For Better Operating Efficiency



The specially built wrapping counter pictured above hides an air-cooled refrigeration condensing unit which supplies the cooling effect to refrigerated fixtures in the Miami Grocery Co. market in Miami, Fla. Providing "breathing space" for the condenser has increased efficiency, it is stated.

## Wrapping Counter Covers Novel 'Out In The Open' Installation of Condensing Units In Food Market

MIAMI, Fla.—Operating costs for display refrigeration in two frozen foods cases, a produce case, and a dairy products case have been cut by 1/3 at the Miami Grocery Co. here through a novel "out in the open" installation of condensing units.

Much of the overly-high operating cost for the display refrigerators was traced to the fact that the condensing units were either located in the basement where there was little or no air circulation, or were built into the refrigerators themselves, according to the management. Condensers had little or no opportunity to receive cooling streams of air, and consequently, it was estimated that compressors were running approximately 33 1/2% more time than was necessary.

The solution, as shown, consisted of spacing out refrigerated display cases to permit installation of con-

densing units right on the sales floor, in an average of 4 x 3 1/2 ft. of space between the cases. Each compressor unit has been given an over-sized condenser, which was located at the front, where cool air from the open doorway of the store, and down large unobstructed aisles had a chance to reach it.

To semi-conceal the condensing units, Miami Grocery Co. has built a wooden enclosure over each unit, which serves as a handy counter for labeling, weighing out merchandise, keeping charge account books, etc. The table resembles a wooden box, except that it is open at the rear and sides, with a large aperture at the front, which permits plenty of air to pass along the condensers. Operating costs dropped almost immediately, and service calls and adjustments have likewise been sharply cut.

## Gasque To Represent Buxton In the East

LOS ANGELES—Buxton, Inc., designer and manufacturer of commercial refrigerators, has appointed Clayton Gasque, former president of Central Business Association, Inc., Washington, D. C., as its eastern manufacturers' agent, it was announced by E. George Sanders, national sales director.

Gasque's headquarters are in Washington, D. C. His home is in Rockville, Md.

## Carrier Plans To Close Plants for Vacations

SYRACUSE, N. Y.—Vacations and inventories will close two Carrier Corp. factories from Aug. 14, through Sept. 6, reports John H. Holton, vice president and director of procurement.

Plants affected by the announcement are the one on South Geddes St. and another on Thompson Rd. Offices will reopen Aug. 30, one week prior to the resumption of factory operations, Holton added.

## Store Cuts \$1 Off Price For Each Mile of Travel

ROCHESTER, N. Y.—The deduction of \$1 per mile for anyone in Monroe county who would come to Alhart's appliance store and purchase a new floor model radio was a recent promotion that gained wide interest here.

Effective for a 10-day period, this unique mark-down system supplemented the store's regular trade-in allowance. In a newspaper advertisement, the offer authorized a \$15 deduction on a floor model radio for anyone living 15 miles away, \$10 off for anyone living 10 miles away, and so on. To attract the reader's eye, Alhart's ran the advertisement sideways the full length of the newspaper page.

## Coolstream Reduces Bottle Cooler Price

NEW YORK CITY—Due to increased production, the Coolstream Corp. has announced a 7% reduction in the price of its bottle type water cooler, Lionel Berken, president, has announced.

## 'Poultry Bar' Has a Refrigerated Window

UTICA, N. Y.—Refrigeration plays an important part in display facilities of the newly remodeled Poultry Bar at 228 Columbia.

The lower half of the show window is composed of a refrigerated display case with a window allowing passers-by to see the poultry displayed. The

## Hanson Heads Pittsburgh Office of Allen-Bradley

PITTSBURGH—Robert L. Hanson has been engaged as manager of the Allen-Bradley office in Pittsburgh.

He is a graduate in electrical engineering of the University of Wisconsin, and has had extensive industrial engineering experience with Wagner Electric Corp., Crocker-Wheeler Co., and Sperry Corp.

Hanson will be assisted by A. F. Landergott in covering the Pittsburgh area.



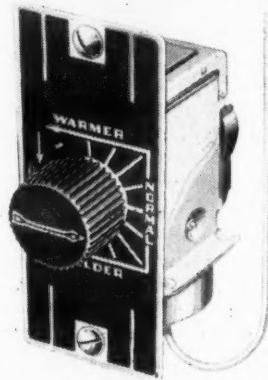
## CHECK with Ranco FIRST

- Specialists In Refrigeration
- Dependability
- Greater Customer Satisfaction
- More Ranco Controls In Use
- Less Stock To Carry
- More Profit For You

## Ranco... for Frozen Food Cabinets

Whatever your replacement requirements, there's a Ranco Control designed to meet your needs. And every Ranco Control is precision built to give the dependable, trouble-free service that pleases your customers and helps you build profitable business. Ask your Ranco wholesaler for complete details.

Ranco Type RJ-3110 Temperature Control, for Frozen Food Cabinets. Adjustable mounting brackets. Range knob controls both cut-out and cut-in settings; differential screw changes cut-out setting only.



**Ranco Inc.**  
COLUMBUS 1, OHIO



World's Largest Manufacturers of REFRIGERATION CONTROLS

Here's How to Make  
**A REAL PROFIT!**

BE AN  
**AUTHORIZED DEALER**  
for *Bally*

MAIL THIS COUPON TODAY—FOR BIGGER PROFITS

Gentlemen:

Tell me more about Bally Case & Coolers and your Authorized Dealer proposition.

NAME \_\_\_\_\_

PRESENT LINES \_\_\_\_\_

COMPANY NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

STATE \_\_\_\_\_

CITY \_\_\_\_\_

START NOW WITH THE  
LATEST BALLY SALES SUCCESS...  
IT'S A NEW PROFIT MAKER!

**"GOLDISPLAY"**

THE 51 INCH ALL-PURPOSE DISPLAY CASE  
WITH COMPRESSOR BUILT IN

Ideal for RESTAURANTS • DRUG FOUNTAINS  
HOTELS • FLORISTS • BAKERIES • TAPROOMS  
DELICATESSENS

PLUS THESE OTHER FAMOUS SALES BUILDERS  
*Bally* TOP DISPLAY CASES *Bally* WALL DISPLAY CASES  
*Bally* REACH-IN COOLERS *Bally* DRY-BOTTLE COOLERS  
*Bally* DOUBLE DUTY CASES



## AUTHORIZED BALLY CASE DEALERS

- Are associated with one of the great names in the industry.
- Have a big opportunity to step up sales.
- Have an exclusive franchise.
- Get plenty of sales helps and cooperation.

DISPLAY FRONT  
OF 3 PIECES  
1/4" MIRROR QUALITY  
PLATE GLASS

ACID-RESISTANT  
PORCELAIN  
INTERIOR & EXTERIOR

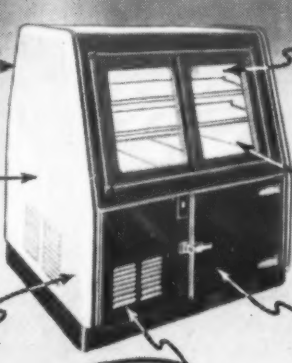
4" ARMSTRONG  
INSULATION

1/4 H.P. HEAVY DUTY  
COMPRESSOR  
CONNECTED WITH  
FLEXIBLE TUBING

FLUORESCENT LIGHTS  
AT TOP OF CASE AND  
ALSO UNDERNEATH SHELF

RUBBER  
SLIDING DOORS  
GLAZED WITH 3 GLASSES

8 CUBIC FT.  
STORAGE SPACE  
WITH AUTOMATIC LIGHT



**BALLY CASE & COOLER CO.**

MAIN OFFICE & FACTORY

**BALLY, PENNA.**

The Ansul Research Staff  
REPORTS ON:**SLUDGES**

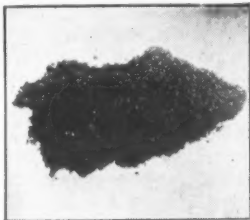
Approximately 90% of the sludges produced in refrigerating systems are due to moisture. The exact cause can always be determined by analysis, but the appearance of the sludge (see photos) is usually indicative of the cause.

## SLUDGE DERIVED FROM MOISTURE—

If water is present in a machine, the nature of the sludge depends upon the type of refrigerant and length of time the water is present. All refrigerants... sulfur dioxide, methyl chloride, Carrene and "Freon-12"... react with water to produce corrosion products characteristic of each. To prevent sludge, the amount of water present in a refrigerating system must be small enough to avoid ice separation and corrosion. For "Freon-12" and methyl chloride, a quantity of water approximately .05% by weight will cause corrosion; the limit is somewhat higher for sulfur dioxide.

## SLUDGE DERIVED FROM OILS—Oil sludges

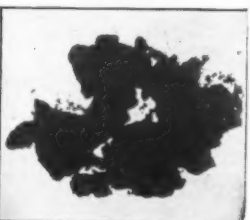
are characterized by total or partial solubility in carbon tetrachloride, gasoline and similar solvents. It is generally presumed that oil sludges are due to two causes: (1) an interaction between the unsaturated constituents of the oil and the refrigerant; (2) a breakdown of the oil due to heat, oxidation, friction, etc.



GRANULAR SLUDGE  
... due to moisture



FLUID SLUDGE  
... due to oil



HARD SLUDGE  
... due to moisture and oil

ANSUL WHOLESALERS are ready and equipped to render an intelligent, co-operative service to refrigeration engineers and maintenance men on problems which arise from time-to-time in the operation of refrigerating systems.

## FOR EXAMPLE:

The Ansul Research staff has developed a method for analysis of sludges. This analysis usually gives the answer as to the origin of the sludge. If you have a sludge problem, send a sample of the sludge with pertinent information to the Ansul Research Laboratory through your Ansul wholesaler. An analysis report will be made for you without charge.

Ansul Refrigerants are available at leading wholesalers everywhere.

REG. U. S. PAT. OFF.

**ANSUL CHEMICAL COMPANY**  
REFRIGERATION DIVISION, MARINETTE, WISCONSIN

DISTRIBUTORS FOR KINETIC'S "FREON-11," "FREON-12," "FREON-21," "FREON-22," "FREON-113" AND "FREON-114"

SEND FOR  
"SLUDGES"  
by Ansul  
Research Staff  
A detailed analysis of the refrigeration sludge problem.



## 'Radiamatic' Pyrometer Aids Low-Temp Processing In Dairy, Food Fields

**MEMPHIS, Tenn.** — Associated Southern Industries, 1161 Union Ave., this city, has been appointed Memphis area headquarters for Westinghouse Unitaire air conditioning equipment, according to J. H. Van Natta and R. B. Buckingham, members of the firm.

Two controls regulate the room air conditioner. A four-position master switch controls the fan and cooling systems and an adjustable fresh air control governs the amount of outside air brought into the unit. A thermostat control, available if desired, will provide completely automatic operation of one refrigerating

The new conditioners are finished in bronze enamel to harmonize with nearly all decorative schemes. However, cabinets can be refinished to match special interiors. The refrigerating systems, including the two compressors, are backed by Frigidaire's five-year warranty.

**CHARLOTTE, N. C.** — **ROSS & Witmer, Inc.**, air conditioning dealer here, is installing air conditioning equipment in the two-story general office building of **American Yarn & Processing Co.** at Mount Holly, N. C., and also the office building of **Wiscassett Mills Co.** in Albemarle, N. C.

Record Call Distributors  
LEE TERMINAL TAMPA, FLORIDA

**EMERSON**  **ELECTRIC**  
MOTORS · FANS · APPLIANCES





## Returnee from ERP-- Hitting the Home Market

(Concluded from Page 1, Column 2)

products as washing machines, vacuum cleaners, and radio and television sets.

"Britain has been the last stop of the selling trips and has proved universally disappointing," the newspaper found.

"Board of Trade and Treasury officials here said they had explained to more than a score of American export salesmen," the *Times* report continued, "that Sir Stafford Cripps, Chancellor of the Exchequer, meant what he said when he ordered European Recovery Program purchases confined to essential foodstuffs and those manufactured goods that would contribute to the nation's productivity."

"Import licenses and permits for purchase of dollar exchange are being controlled as stringently now as in days before ERP."

## Manufacturers' Sales Drop 4% During April

WASHINGTON, D. C.—Manufacturers' sales were \$17.3 billion for the month of April, according to preliminary reports by the Commerce Department. This represents a 4%, or \$800 million, drop from the March level, accounted for, in part, by there being one less working day in April.

April sales of durable goods were down 6% to a total of \$6.9 billion. This drop was actually only 2%, the department pointed out, if the one less working day is considered.

Manufacturers' inventories of \$29.1 billion at the end of April showed no significant change from the March level, it was indicated.

## OHI Directors Schedule Meeting for July 12-13

NEW YORK CITY—Board of directors of Oil-Heat Institute of America will hold a two-day meeting at Wentworth By-The-Sea, Portsmouth, N. H., on July 12 and 13.

On Monday, the 12th, there will be a meeting of the Planning Committee and also meetings of the Executive Committee of the Distribution Division, and a meeting of the board of directors of Oil-Heat Institute Associates immediately following.

The Publicity and Legislative Committee of the Institute will report completely to the board and members present on its activities in connection with the oil supply problem.

## Dept. Store Sales Up 18% For Week Ending May 29

WASHINGTON, D. C.—An 18% rise in the dollar volume of the nation's department stores over the corresponding week last year was reported for the week ended May 29 by the Federal Reserve Board.

Probable reason for the unusually large increase was given as the fact that most stores closed on Friday of the 1947 week because of Memorial Day.

All districts reported gains, with the Kansas City area leading with a 30% gain. At the bottom of the list was the Atlanta district, recording only a 1% gain, according to the board's figures.

Percentage gains by district were: Boston 8, New York 23, Philadelphia 19, Cleveland 20, Atlanta 1, Chicago 19, St. Louis 19, Kansas City 30, Dallas 13, and San Francisco 22.

## How Do You Like Your AIR?

- Carrier Products to Control Its Temperature and Humidity.
- Raytheon Products to Clean It of All Dirt and Pollen.
- Aikem Products to Freshen and Deodorize It.



See Exhibit Booth 24

At the

BIRMINGHAM HOME SHOW

City Auditorium, April 24-30—Admission Free

SHOOK & FLETCHER SUPPLY CO.

1814 First Avenue, North

How one air conditioning dealer told his story to 65,000 visitors to the Birmingham, Ala. Home Show during the last week in April is illustrated above. In the booth pictured, the Shook & Fletcher Supply Co. showed a Raytheon room unit, a Carrier 3-ton air conditioning unit, a 3/4-ton Carrier window model room cooler, a 3/4-ton Carrier console room cooler, and a 15-cu. ft. home and farm freezer. Shook & Fletcher represents the Carrier, Raytheon, and Aikem lines throughout the state of Alabama.

## Demand Holding--

(Concluded from Page 1, Column 5) the 1947 pattern, as many as 20,000-000 families may buy durable goods. Here is how current anticipated demand for individual products compares with last year, according to the survey:

About 1,500,000 families contemplate buying washing machines; last year's figure was 1,400,000. Some 2,300,000 families plan to purchase radios, compared with 1,700,000 in 1947. Around 3,000,000 want refrigerators, one tenth less than the number intending to buy boxes a year ago. Whereas 3,700,000 families said they were going to buy furniture in 1947, 4,200,000 think they will do so this year.

The survey shows that consumers have the money to carry out their plans, or can get it. More than half of all families were earning more last year than in 1946, nearly two-thirds have some savings, and almost 9,000,000 families used instalment credit in 1947 (approximately double the 1946 figure).

At least one quarter of all families will pay for their 1948 durable-goods purchases out of savings or with credit, FRB concludes. Last year, one out of four families paid out more than it took in.

The survey also discloses that higher income groups are planning to buy a great deal more than they did last year and the lower income groups considerably less. Two factors are responsible for this shift in buying: millions of families are moving up to higher income levels and low-income families are being forced out of an increasing number of markets by higher prices.

Generally higher consumer incomes are expected to be increased further through government spending and tax cuts. This will help keep demand for household goods at a high level, it is anticipated.

## Bi-State Gets Admiral Line

CHICAGO — Bi-State Distributing Corp. of Omaha, Neb. has been appointed exclusive distributor of Admiral radios, refrigerators, and ranges in the state of Nebraska, according to W. C. Johnson, general sales manager for Admiral Corp.

## Court Ruling Hits--

(Concluded from Page 1, Column 4)

with myriad line designs of an objectionable and undecorative nature."

Judge Smith expressed the opinion that continuation of this condition might be corrected by some change in the air conditioning unit or by properly sealing the wall. He ruled that Horn and Hardart must stand the cost of such work and also the cost of repapering Banks' side of the wall.

Banks sought to have a new party wall constructed at a cost of \$1,500 and new wallpaper put on for \$500.

He had charged that the air being pulled through the wall caused a condensation of its water vapor. He said that he had repapered the wall several times since the air conditioning unit was installed, but to no avail.

Attorneys for the restaurant had countered that the air conditioning unit caused no suction and that what was happening was "wall breathing, a well recognized, scientific phenomenon which is normal and inevitable."

Judge Smith, however, ruled that even though the air conditioning unit was properly installed and in perfect working order, it was a nuisance in this case.

## A. L. Brown Moves Office From Marietta to Atlanta

ATLANTA, Ga.—Austin L. Brown, manufacturers' representative, has moved his office from Marietta, Ga. to 809 Bona Allen Building here. His new telephone number is Main 8481.

## DISTRIBUTORS WANTED!

AMERICA'S GREATEST BEVERAGE COOLER

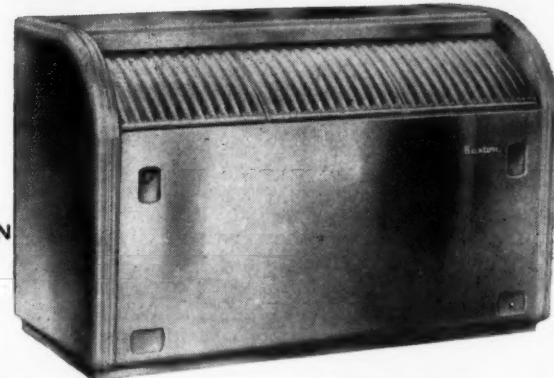
**BUXTON CHILL-AIRE**

THE ALL-STAINLESS DURAL DRY BEVERAGE COOLER

FOR IMMEDIATE DELIVERY

### Features That Really Sell

- ALL ALUMINUM  
Inside and out
- GLASS INSULATION  
Cannot settle; vermin proof
- IT'S DRY  
No messy water or ice
- OVERSIZE COOLING UNIT  
For rush hours
- ADJUSTABLE DIVIDERS  
For any size bottles
- UTILITY SHELVES  
Pre-cool glasses, juices
- EXTRA CAPACITY  
A 5 ft. holds 21 cases (12 oz.)  
An 8 ft. holds 35 cases (12 oz.)
- CURVED DOORS  
They close automatically



TWO SIZES  
8-Foot and 5-Foot

### WRITE OR PHONE TODAY

For complete details—descriptive literature, price lists, territories available write or phone E. George Sanders, General Sales Mgr. at 3120 N. Main St., Dayton, Ohio. (Temporary nat'l sales office.) Phone Randolph 2147.

**BUXTON, INC.** 1900 E. 48TH ST. LOS ANGELES 11, CALIF.

FOR YOU

2

PROFITABLE CONNECTIONS

**SNO-BREZE COOLERS**

and

**Palmaire HEATERS**

**SNO-BREZE COOLERS** EVAPORATIVE



Guaranteed air delivery. Certified cooling performance.

You completely cover this tremendous sales potential with a Sno-Breze model, type and size for every need.

Residential Building	Commercial Building	Governmental Building
Trailers to Estates	Retail, Manufacturing, Distributing	City State National

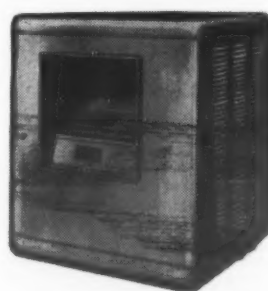
And Remember, you are backed by progressive, energetic engineering, manufacturing, selling and advertising policies that keep Sno-Breze the "recognized leader" in the evaporative cooler field.



**Palmaire SUSPENDED UNIT HEATERS**

The main stays, of course, are the improved ever popular suspended Palmaire U.F. 100,000 and U.F. 190,000 BTU gas fired heating units. These ceiling heaters have marked another milestone in heating achievement for Palmaire engineers. "These units practically sell themselves," say dealers, "and each Palmaire unit sold means another satisfied customer."

Remember too Palmaire heating units are F.O.B. destination.



## WORLD-WIDE SERVICE!

Refrigeration • Air Conditioning • Heating Supplies Shipped Anywhere

Everything and anything in parts and supplies shipped all over the globe. Scarce items back, new lines added...most complete stock available anywhere in our enlarged modern building. Big or little, your order gets speedy personalized attention. Thousands of satisfied customers use our dependable service to save working-hour time, energy. Write for catalog...on your letterhead...today!



Export Sales Division  
SCHEEL INTERNATIONAL, INC.

THE SUPPLY HOUSE THAT SERVES THE WORLD • Wholesale Only

**SERVICE PARTS CO.**  
2511-2611 LAKE STREET MELROSE PARK, ILLINOIS

MAIL COUPON TODAY FOR FULL DETAILS!

### 39 Years of Air Conditioning Leadership

PALMER MANUFACTURING CORP., PHOENIX, ARIZONA, DEPT. N-4

Gentlemen: We are distributors..... Dealers.....  
Please send free literature on Sno-Breze Coolers..... Palmaire Heaters..... Both.....

NAME.....  
ADDRESS.....  
CITY..... ZONE..... STATE.....



## Nebraska Expert Lists Best Vegetables for Freezing

LINCOLN, Neb.—Because of the increasing popularity of the frozen food locker and home freezer unit, home gardeners, in selecting the varieties of the various vegetables they are going to plant, now must consider not only those varieties adapted to the soil and climatic conditions they are to be grown, but also those varieties that will give the best quality product when frozen, Nebraska experts are being warned by Wayne Whitney, extension horticulturist at the University of Nebraska.

Whitney pointed out that experiments have shown certain kinds and varieties of vegetables to be better adapted to freezing than others. Recommended for Nebraska are:

Asparagus—Washington and Paradise varieties.

Beans—(Lima) Henderson Bush, Baby Potato, Hopi.

Beans—(Snap) Stringless, Greenpod, Tendergreen, Bountiful, Kentucky Wonder, Black Valentine, Round Pod, Kidney Wax.

Beets—Detroit Red, Dark Red.

Broccoli—Italian Green Sprouting, Carrots—Nantes Coreless, Improved Chantenay, Danvers Half Long.

Peas—Little Marvel, Laxton Progress, Hundred-fold, Blue Bantam, Edible podded sugar peas.

Spinach—Bloomsdale Savoy, Bloomsdale Long Standing, Giant Nobel, New Zealand.

Sweet Corn—Golden Bantam, Golden Cross Bantam, Tendergold, Narrow Grain Evergreen, and Marcross.

## M. A. Gaal To Represent McQuay In Four States

MINNEAPOLIS—Michael A. Gaal has been named refrigeration representative for McQuay, Inc., Minneapolis manufacturer of refrigeration and air conditioning equipment in Michigan, northern Ohio, northwestern Pennsylvania, and northwestern New York.

Gaal has spent 23 years in refrigeration sales, service, and engineering work, mostly with the Delco and Frigidaire divisions of General Motors. For the past three years he has been manager of the commercial and air conditioning sales department of the D. K. Baxter Co., Frigidaire distributor at Sioux City, Iowa.

## Kenneth Stigberg Gets Post On Victor Products Staff

HAGERSTOWN, Md.—Kenneth Stigberg has joined Victor Products Corp. as staff assistant to the manufacturing department.

A graduate of Pratt Institute, Stigberg comes to Victor Products from the Bullard Co. of Bridgeport.

In the capacity of staff assistant to the manufacturing department at Victor, he will study and develop new assembly line methods for commercial refrigeration production.

## CLASSIFIED ADVERTISING

RATES for "Positions Wanted" \$2.50 per insertion 50 words or under. 5¢ ea. additional word.

RATES for all other classifications \$5.00 per insertion 50 words or under. 10¢ ea. additional word.

ADVERTISEMENTS set in usual classified style. Box addresses count as five words, other addresses by actual word count.

### POSITIONS WANTED

**SALES ENGINEER**, real producer. Experienced, as Sales Manager and General Manager of refrigeration and store fixture business all types. Desire permanent connection with established refrigeration distributor in Southern California. (Preferably Los Angeles area) as Sales Manager or General Manager. Best references. Will be in the area July 1st for interview, available October. Salary and percentage of net. BOX 2811 Air Conditioning & Refrigeration News.

**BUFFALO ONLY**, 10 years "Freon" & MC. Qualified to install, service, overhaul, supervise, instruct. Gas & arc welding, brazing, pipe fitting, electric. 5 years own business. Age 32, married. Consider only permanent position, year round, respectable pay, chance to advance. Will learn heating. BOX 2816 Air Conditioning & Refrigeration News.

**SPANISH SPEAKING** Sales and Installation Engineer, 20 years experience Commercial, Industrial Refrigeration; Electrical and Gas Appliance Sales Management; Advertising; Design and Construction of Commercial Cabinets, offers services to leading manufacturer or exporter requiring expert with extensive experience Latin-America. BOX 2823 Air Conditioning & Refrigeration News.

**MECHANICAL & SERVICE** engineer age 32 desires position as service manager in which event will favor the company with mechanical engineering, fully qualified in layout application and design, 13 years experience with last assignment by the Army Air Forces in the Korea bases as mechanical engineer. BOX 2824 Air Conditioning & Refrigeration News.

**EXPERIENCED COMMERCIAL** and industrial sales and service man; married, 34 years old and 14 years experience on air conditioning and commercial refrigeration. Own tools and truck. Desirous of securing position with chance for advancement in Penn., Ohio, New York State or New England States. BOX 2829 Air Conditioning & Refrigeration News.

**SALES ENGINEER**—age 33, married. Aggressive, personable, university graduate seeks new connection where abilities and energies may be fully employed. Ten years broad sales experience. Three years specialized sales in commercial refrigeration and air conditioning. Presently employed at management level. Excellent references. Capable administrator familiar with all phases of sales management, promotion, and advertising. BOX 2830 Air Conditioning & Refrigeration News.

### POSITIONS AVAILABLE

**COMMERCIAL AND INDUSTRIAL** refrigeration and air conditioning installation and servicemen with at least 3 years experience. 40 hour week, company trucks furnished. \$1.80 to \$2.00 scale. DRESCO REFRIGERATION COMPANY, 4404 Woodward, Detroit 1, Michigan.

**FACTORY REPRESENTATIVES**—Several territories available for experienced representatives. Send brief life history and references to FILTRINE MANUFACTURING CO., Brooklyn 5, N. Y.

**I NEED** salesmen—I want high-grade men who already have demonstrated their ability to sell commercial refrigeration equipment or air conditioning. Lines handled (on distributor basis) are Hussmann, Typhoon, Sanitary, Jim Vaughan and others. Openings available in Pensacola, Panama City and Tallahassee, Florida, and in Mobile and Montgomery, Alabama. Remuneration: straight commission, incentive plan or straight salary, based upon your qualifications. Full information and references required. Write, wire or phone HUGH GILMORE, P.O. Box 628, Pensacola, Florida. Phone 7393.

**WANTED: SALESMEN**, factory representatives—calling on dealers. Splendid opportunity for modern "sink high" refrigerator with space-saving work-top. Very popular. Big dealer demand. Commission basis. Exclusive territories. Write giving experience, lines carried, territory covered, references. MOSS ATLAS CORP., 244 Herkimer St., Brooklyn 16, N. Y.

**AVAILABLE NOW**. Attractive connection for sales representative with progressive manufacturer of nationally advertised and distributed heating and cooling equipment. Several territories available. Individual must have good sales record, and be able to stand bond. Submit qualifications with photograph to PALMER MANUFACTURING CORPORATION, Phoenix, Arizona.

**A SUBSTANTIAL** firm, of high rating needs an experienced refrigeration and air conditioning service man. He must be competent to do any indicated work, such as installations, brine tank coil fabrication, etc. He must be able and willing with both heating and cooling systems. State full qualifications and salary requirements in first letter. This is an opportunity, not just "another job." WEST FLORIDA MECHANICAL COOLING CORP., 421 Oak Street, Panama City, Florida.

**WANTED** SALES engineer. An old-established company wishes to secure the familiar with Ammonia and "Freon" services of a refrigeration engineer, equipment, for Wisconsin or West Michigan territory. Preference will be given to a man with technical education and capable of handling a district office. In reply state age, experience and other qualifications. BOX 2778 Air Conditioning & Refrigeration News.

**WANTED**, FIRST class refrigeration man to take full charge of group of stores doing business in Flint, Michigan for 28 years. Must have background of long experience in home freezers and domestic refrigeration. Salary commensurate with ability. Write full details of qualifications, experience, and salary expected in first letter. Write BOX 2802 Air Conditioning & Refrigeration News.

**REFRIGERATION ENGINEER**: Nationally known refrigeration manufacturer has opening in Chattanooga for engineer with about three years experience in compressor design, development, and manufacture. Permanent job; salary commensurate with ability. Write full details of qualifications. Enclose two photos (not returnable). BOX 2812 Air Conditioning & Refrigeration News.

**MANUFACTURERS SALES** agents wanted to represent reliable manufacturer of high quality Freezers and Milk Coolers. Applicants must have a proven record in the sale of commercial refrigeration. State age, experience and location preference. BOX 2818 Air Conditioning & Refrigeration News.

**SALESMAN-FACTORY** Representative wanted by nationally known manufacturer low-temperature cabinet and soda fountains, to sell to dairies, ice cream manufacturers and refrigeration dealers. Territory Illinois and Indiana. Drawing Account. Please mail complete information to BOX 2826 Air Conditioning & Refrigeration News.

**AGGRESSIVE SALESMAN** for permanent sales position in Detroit. Ages 30 to 45. Must be neat appearing, have own car and able to sell full line of nationally known refrigeration and air conditioning equipment. BOX 2827 Air Conditioning & Refrigeration News.

**REFRIGERATION ENGINEER** on household units. Must have experience with capillary restrictors, heat exchangers, evaporators and condensers. We have a good opportunity for an aggressive man. Location, Michigan. Salary open. BOX 2831 Air Conditioning & Refrigeration News.

### EQUIPMENT WANTED

**EQUIPMENT WANTED**: Interested in purchasing refrigeration condensing units fractional horsepower standard brand from 1/4-HP to 1-HP. Will pay cash F.O.B. your warehouse. Advise quantity, model and make. BOX 2820 Air Conditioning & Refrigeration News.

### EQUIPMENT FOR SALE

**SELLING OUT** at a fraction of our wholesale costs. Top brands—beverage coolers, dry-type, frozen food cabinets 16 cu. ft. For a real good buy, write ACME REFRIGERATION CO., 634 Dean Street, Brooklyn, New York.

**DAYTON REFRIGERATORS**—complete sealed units. Parts for open type Dayton units. Heinz and Munschauer factory representative. ANCHOR REFRIGERATION SERVICE, 1024 Genesee Street, Buffalo 11, New York.

**VALVE BARGAINS!** 2 1/2" Wing cap globe, Kero. 461S—\$19.76. 1 1/2" Packless Globe, Kero. 455S—\$21.60. 1 1/2" Wing Cap Globe, Kero. 574S—\$9.50. 1 1/2" IPS Iron Body W. C. Globe—\$6.00. 3/4" Angle, pkls., Kerotest 6981S—\$3.00. 3/4" Receiver valves, Kero. 235S—\$7.75. 3/4" Relief, Kerotest 51-S-300#—\$3.45. 3/4" SAE packed globe, with handwhl.—\$8.85. Orders over 100# prepaid. ANCHOR SUPPLY CO., 1742 4th Ave., So., Seattle 4, Wash.

**SEALED UNITS** rebuilt and exchanged. Prompt service on Coldsport (sealed & semi-sealed) Chieftain, Gale, Tecumseh, Norge and many others. One year guarantee. Write for price list and shipping instructions. BRIGHTON, 16640 Log Cabin, Detroit 3, Mich.

**YODER FREEZER** plates, 18" x 60", manufacturer has surplus quantity, sacrificing at \$4.00 each. Minimum Order 6. FRANKLIN REFRIGERATION CO., 805 E. 145th St., New York 55, N. Y.

**EXCESS INVENTORY** of new Universal Condensing Units in original crates with motors; 1/2 hp \$79, 3/4 hp \$92. HERBEN EQUIPMENT COMPANY, 2630 Fifth Avenue, Pittsburgh 13, Pa.

**MOTORS**—1/2 H.P. Century Elec. Co. Refrigeration Motors, rebuilt, type RS, 110-220 volt, 60 cycle, 1750 R.P.M. \$16.50 ea., lots of six—\$16.00 ea., lots of 25—\$15.25 ea. Send check, shipped immediately. JOSEPH A. KLAUSE, 3101 N. 32nd St., Philadelphia 32, Pa.

**3 HP CARRIERS** \$310. 5 HP Mills \$395. 50 HP Schnacke less motor \$1195. 5 HP McQuay & Typhoon Weathermakers \$395. 3/4 & 1 HP Amco Weathermakers \$175 & \$195. 15 HP Larkin Evaporative Condenser \$785. The following less motors: 1/2 HP Crew & 1/4 HP Copeland units \$89 each; 1/2 HP Universals \$49 each. All new crated. PILGRIM REFRIGERATION CO., 48-20 43rd Ave., L. I. City, N. Y.

**REMOVED FROM** New York department store due to building expansion, this equipment was maintained by refrigeration engineers and is in very good condition, 3 G.E. 5 H.P. condensing units, \$1000.00 each. 3 G.E. 20 H.P. condensing units, \$800.00 each. 1-60 ton water chiller \$450.00. 4-25 ton water chillers, \$150.00 each. Prices quoted F.O.B. N. Y. Warehouse. NAT ROSENTHAL, 131 Thompson St., New York 12, N. Y. Gramercy 7-3044.

**SEALED CROSLLEY** terminals. Installed from the outside in a few minutes without opening the compressor or removing unit. No special tools needed. Stops leaky terminals on "F-12" units. Part # 1020 short model—for short Croslley terminals ("F-12" compressors with 4 mounting legs.) Part #1020 long model—for long Croslley terminals ("F-12" compressors with 3 mounting legs). \$5.25 set of three. Immediate delivery. Money-back guarantee. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56, N. Y.

**FRIGIDAIRE 15 TON** compressor in good condition \$850.00. 20 ton used Acme Chiller Z Baffle \$350.00 f.o.b. Omaha. SIDLES CONDITIONED AIR COMPANY, 508 S. 19th St., Omaha, Nebr.

**SUBJECT TO prior sale**: Universal Cooler hermetics, 1/2 H.P. 42.00—Lots of 10—\$9.00. 1/2 H.P. 51.50—Lots of 10—\$9.50. 1/2 H.P. Light duty 59.50—Lots of 10—\$7.00. 1/2 Capacitor heavy duty 65.00—Lots of 10—\$6.50. 1/2 O.D.S. Kerotest packed 2-way valves 2.00. 1/2 flare Kerotest packed 2-way .85. 1/2 flare Mueller "Freon" relief valve 1/2 O.D.S. 2.00. Filter-Drier Silica Gel 1 1/2" x 6 1/4" over all—Lots of 10—\$.65. U. S. Gauge "Freon" 4 1/2" 30"—150# and 300#. Corresponding temp. scale—red warning hand 4.50. 2 1/2" 30" 100#—Recal. 1.25. With mounting holes. Frigidaire leak detector 3.50 F.O.B. Chicago. Send for listing of other parts. WALTER W. STARR, 1207 George St., Chicago, Illinois.

**REBUILD YOUR** own sealed units. Send us your burnt and stuck up heads and they will be immediately replaced from our stock. Send for our complete price list. TECHNICAL REFRIGERATION SPECIALISTS, 362 East 180th Street, Bronx 57, New York.

**BEVERAGE COOLERS** (under Bar) slant slide top—5 and 6 foot lengths—Blower Coil—Stainless Steel interior and exterior—Beautiful—17 case capacity—24" deep—38" high. Priced at only \$210.00, crated, F.O.B. Los Angeles. Write for literature. Bargain to reduce surplus. Only 70 available. VIKING SALES CORP., 1481 W. Washington Blvd., Los Angeles 7, California.

**IMMEDIATE DELIVERY** from stock, FOB New York, Delco Motors: 1/2 SC 16.28; 1/2 SC 18.96; 1/2 SC 18.48; 1/2 SC 24.16; 1/2 RI 34.56; 1/2 RI 44.24; 1 RI 61.60; 1 1/2 RI 79.20. All industrial, other motors, on hand. WHOLESALE DISTRIBUTORS, INC., 150-19 Liberty Ave., Jamaica 4, N. Y. Jamaica 6-1733.

**REVERSE DRY-SEAL** (Dehydrated) Copper Tubing, 300 Rolls of 3/4" OD x .035 Wall x 50"—\$3.75 each. 110 Rolls of 1 1/4" OD x .035 Wall x 50"—\$2.75 each. BOX 272, Demopolis, Alabama.

**SUPER-COLD** ice cream machines with malt attachments. 2 1/2 Gallon capacity. Limited number to clear out at \$575.00. BOX 2822 Air Conditioning & Refrigeration News.

**SECTIONAL FREEZER** rooms: 10 x 12 x 6 1/2; metal clad; glass wool insulation; \$800.00 per room. Erect or dismantled in one day; 3 hp self-contained "Freon" refrigeration equipment (zero temperature) \$500 each room, requires only electrical plug-in. All brand new. F.O.B. Ohio warehouse. BOX 2828 Air Conditioning & Refrigeration News.

### BUSINESS OPPORTUNITIES

**AUDEL'S REFRIGERATION** and Air Conditioning Guide. A useful manual, 1280 pages. Fully illustrated, covering the theory, construction, servicing, operation and repair of household, commercial and industrial refrigeration & air conditioning. 1001 facts. Easy to understand. Highly endorsed by service men and mechanics. Price \$4 postpaid. Money refunded if not pleased. AUDEL, PUBLISHERS, 49 West 23 St., New York 10, N. Y.

**AIR CONDITIONING** & commercial refrigeration business doing better than \$200,000.00 annually, located in the North-western part of Indiana about thirty miles from Chicago. Franchised with the recognized leader of the field. Good engineering, sales and service force. A year-round business. Will sell all or one-half interest. Write BOX 2801 Air Conditioning & Refrigeration News.

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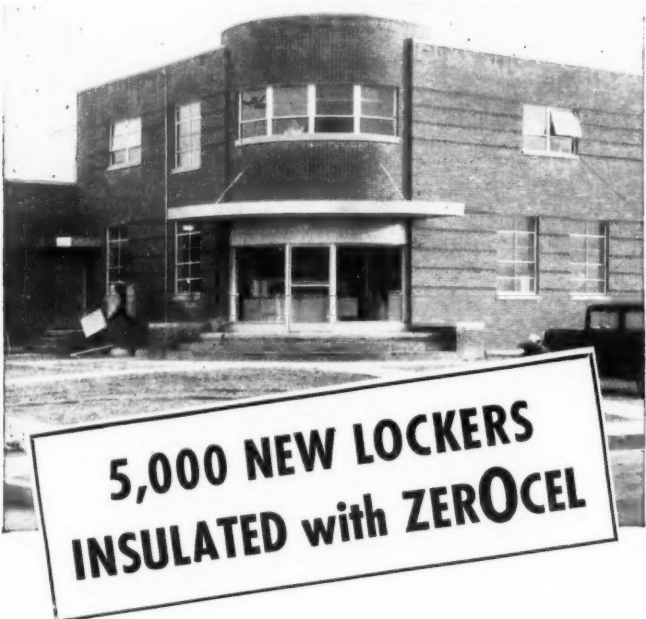
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## Expansion of Industry Seen Increasing Electrical Load 72% During Next Decade

ATLANTIC CITY, N. J.—A 72% increase in the use of electricity in this country by 1958 was forecast by Gwilym A. Price, president of the Westinghouse Electric Corp., before the annual convention of the Edison Electric Institute.

Price estimated that in the next 10 years total annual sales of electric power will rise to approximately 374 billion kilowatt hours.

"When that figure is attained, as we predict that it will be, the American public will be using in one day as much electrical current as it required in six months in the earliest years of this century. To meet this tremendous demand, power generating facilities will have to be increased 80% over the present installed capacity—an annual increase of over four million kilowatts, even without replacement of obsolete equipment.

"And this is not all because your systems will have to be expanded to handle this power. In the next 10 years you may spend for new construction an amount equal to the present value of your utility plant after 60 years of growth."

### FINANCING IS BIGGEST JOB

Apparatus improvements and standardization will aid the industry in meeting this growing demand for power. But financing the huge construction program "is today's most critical domestic question."

Since the war, capital expansion—greatest in peacetime history—has been financed almost entirely from industry's own funds and its borrowings.

"Venture capital will not go to work for today's starvation wages—by which I mean the meager net cash return after corporate and individual taxes are paid," said Price.

"The simplest and fairest method of raising those wages is to eliminate the double taxation of dividends by making them free of tax on the stockholder.

"This would result in large-scale investment, reduced debt and fixed charges, enlarged and modernized productive facilities, lower costs and prices, higher living standards, and continued full employment.

"The benefit to the stockholder would be shared by those millions for whom jobs would be created and preserved, and by the nation as a whole."

Predictions of the nation's future power needs are based on a recent Westinghouse study made to assist the company in its planning.

### LONG-TERM PROJECTIONS

"Of course such predictions may not be made good at exactly 2:38 p.m. on the afternoon of June 2, 1958," Price said. "The projections are on a long-term basis, with no attempt to time such cyclical swings as may occur. They are based on our assumption of the continuance of a high level of peace-time industrial activity and employment."

Improved living standards are a prime reason for predicting that there will be a 73% increase in the average use of electricity by residential customers, while the number of customers increase by approximately one-sixth.

A 42% rise is expected in the number of farm customers, to the point where nine farm families out of every 10 in the nation will be benefitted from electrical service. The average annual farm load should go to 4,000 kilowatt hours and this would mean the sale of current to rural customers would be more than doubled.

The forecasts show that the use of power by small businesses—industrial and commercial—will rise by one-half, while demand from the large industries and commercial establishments is likely to climb even more.

"In this survey, we have tried to be hard-headed and realistic. The estimates are based, so far as possible on fact; they are not mere extensions of curves of past performance. However, large as are these charted increases, we sincerely believe that our predictions are on the conservative side. This is because numerous trends are at work—some that may be calculated with a fair degree of accuracy, some that are less tangible. Let me cite some examples:

"First, there are conspicuous changes in the industrial scene. Some of these will add up to new or essentially new industries; all will build power system load, either directly or indirectly. Each entails the use of large amounts of steel, apparatus of many kinds, fabrications—all of which require for their creation a large amount of electric power.

### BUSINESS GAINS TWO WAYS

"One extra-favorable circumstance about your business is that it stands to gain two ways from every new type of equipment, every new product. It takes power to build and equip the plant, as well as to make the product.

"Consider the synthetic fuel program, for example. Uncertain world affairs and the threat of declining petroleum resources make it appear inevitable that we shall see a new and gigantic industry created for the conversion of coal into liquid and gas fuels and chemicals. The first production stages of this announced program call for plants to provide two million barrels of liquid fuel a day.

"The United States Bureau of Mines has indicated that in magnitude this will be five to 10 times the size of the synthetic rubber program. It will call for many million tons of steel, fabrication facilities, and equipments of every description.

"For another illustration, look to the steel industry, whose reserves of high grade ore are being depleted. Their problem is to treat low grade ores so that they may be brought up to equality with the better ores. This process requires great quantities of electrical energy. The power content of a ton of iron ore will be raised from the present figure of four and one-half kilowatt hours to 70 kilowatt hours.

While such changes are somewhat startling, Price said, probably the greatest part of the increased electrical load will come as a result of expansion in much more familiar fields.

## Funny 'Line' Wins Woman Top Honors In Contest Run by Dealer

BREMEN, Ind.—An amateur story-telling contest conducted by Berg's Refrigeration at a mass demonstration of Bendix home laundry equipment resulted in five women volunteering to tell their most unique washday story, with the audience selecting the winner through applause.

The winner told about trying to hang a shirt on a pulley-suspended line which led from her back porch to a pole in the alley. She slipped and, instead of hanging the shirt, rode the line to the alley!

Assisting Russell Berg and his son Fred, at the demonstration were three representatives of the Radio Equipment Co., Inc., South Bend, distributor for Bendix Home Appliances, Inc. They reported the demonstrations resulted in a number of prospective sales.

## O. E. Stevens To Represent Remco In Southeastern States

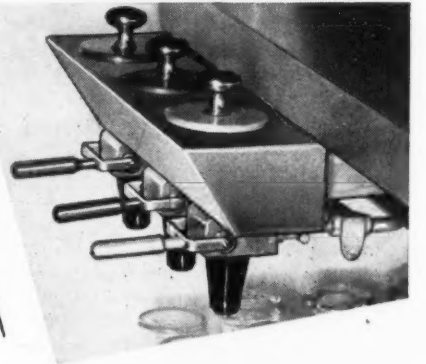
PITTSBURGH—Appointment of O. E. (Steve) Stevens as Remco representative in six southeastern states has been announced by K. M. Newcum, president of Remco, Inc., here.

Stevens, who had been a factory representative for the Dayton Rubber Co. for nine years, will cover Virginia, North Carolina, South Carolina, Georgia, Florida, and eastern Tennessee for Remco. His headquarters will be at 300 Keswick Ave., Charlotte, N. C.

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Governor



Earl Warren

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# Wholesale Salesmen Urge President To Veto Gearhart Bill

NEW YORK CITY—Wholesale salesmen are waging an uphill battle to preserve their rights under the Social Security Act.

They have lost the first battle of Congress—an attempt to block passage of the Gearhart bill that will exclude them from benefits under the act. Now, through the National Council of Salesmen's Organizations, they are urging President Truman to veto the measure.

At the same time, they are fighting the second battle of Congress—an attempt to defeat House Resolution 6777 that would extend Social Security coverage to 3,500,000 more persons but would specifically exclude salesmen paid on a commission basis. This resolution was recently approved by the House Ways and Means Committee.

Louis A. Capaldo, president of salesmen's council, admitted that it would be tough to get President Truman to veto the Gearhart bill because of a Senate amendment that increases the pensions of needy, aged, and blind persons and dependent children.

He charged that a lobby of direct selling organizations was fighting against Social Security benefits for salesmen.

"We are doing everything possible to help the 1,500,000 salesmen of this country, but in their present state of inadequate organization, it is extremely difficult to contend with such powerful opposition," he asserted.

Mitchell M. Shipman, general counsel for the council, castigated the ways and means committee for reporting out resolution 6777. He called the resolution a "phantom piece of legislation."

"In the face of the Supreme Court decisions and the recommendations of both the Treasury and the Social Security Administration that wholesale salesmen are fully entitled to share equally with other Americans in Social Security, the committee has written into the bill a provision expressly denying them that right," he declared.

"They have followed the pattern of the Gearhart bill and resorted to hair-splitting legalisms in defining the meaning of the word 'employee.'"

"Both bills ignore the fact that wholesale salesmen, with the exception of a small number who are independent contractors and therefore their own bosses, are as dependent upon their pay checks as any other employees of business or industry," Capaldo said.

## At Virginia Smelting



D. W. Duncan W. F. Luckenbach, Jr.

## Duncan and Luckenbach Named to Key Posts

WEST NORFOLK, Va. — Two young men have been appointed to key posts, one in sales and the other in manufacturing, by the Virginia Smelting Co. here, producer of refrigerants and other industrial chemicals.

They are W. F. Luckenbach, Jr., who becomes manager of industrial sales, and Dr. Daniel W. Duncan, who is named head of the company's chemical engineering process improvement section. Luckenbach is 35 and Duncan 32.

The appointments were in line with a company "youth policy," said A. K. Scribner, general manager. The company, which marks its 50th anniversary this year, makes a practice, he said, of hiring able young college graduates and moving them up fast as well as of bringing in experienced young men of demonstrated ability and placing them immediately in responsible positions within the company.

Luckenbach came to the Virginia Smelting Co. from the Foote Mineral Co., Inc., of Philadelphia, where, during more than six years, he moved from sales engineer to director of research and, by choice, back to sales engineer again.

In his job at Virginia Smelting, Luckenbach is in charge of the sale of such chemicals as sulphur dioxide, sodium hydrosulphide, zinc hydrosulphide, zinc sulphate, and methyl chloride to firms in 40 industries.

Dr. Duncan obtained his Ph.D. degree in chemical engineering from Ohio State university. His thesis on fractional distillation was read before the American Institute of Chemical Engineers.

Dr. Duncan went with Proctor & Gamble at its Ivorydale plant in Cincinnati, where he was engaged, during the earlier of his six years there, with process development on synthetic detergents.

At Virginia Smelting, Dr. Duncan heads a department which has eight men now and is expanding. He is seeking to improve quality and yield of the company's products and reduce the cost of production.

## Locker Plant Trouble--

(Concluded from Page 1, Column 5)

has not as yet been turned off, and an emergency committee sponsored by the Greenwich Chamber of Commerce has raised enough money to keep the Greenwich plant (630 lockers) in operation for at least another month. There is a possibility that some patrons of the Greenwich plant who are quite well off financially, may work out some cooperative plan to keep the plant there operating.

It was Chiostergi's program, as of June 8, to keep in operation for a couple of weeks the White Plains plant (1,500 lockers) and the Bronxville plant (about 600 lockers). He thinks that local groups might be formed to keep these two units going.

However, he saw little hope for continuing the operation of the Rye and Larchmont plants, both small units with 400-locker capacity. He is making plans to offer these plants and their equipment at auction within a week or so, if no buyers are found.

Various reasons were assigned for the financial failure of the company which had operated the plants. One report stated that the company had failed to sell the volume of processed meats and other foods to patrons that it had anticipated. Others felt that the operating overhead expense had got out of hand.

## Freeman Hussmann Dealer

NEWNAN, Ga.—Freeman Refrigeration Co. here has been appointed dealer for Coweta, Carroll, Heard, Troup, and Fayette counties for Hussmann refrigeration equipment.

## Labor Negotiations--

(Concluded from Page 1, Column 3)

hour. G-E emphasized that it would not agree to a flat increase for all employees, but wanted the amount received by each employee to bear a direct ratio to the skills involved in his job. The company also made its offer contingent on the union's withdrawal of all other economic demands and on satisfactory adjustment of all non-economic points of contention, and specified that the new agreement was to continue for two years.

The union had asked that G-E adopt the General Motors settlement formula, under which wages are raised or lowered every three months in accordance with fluctuations in the Bureau of Labor Statistics consumer price index, or grant the flat 13-cent hourly pay rise approved by the Chrysler Corp.

G-E rejected both these suggestions, stating that in its belief it was unsound for every employer in the country to have to follow a pattern set by one or two large companies in meeting their own specific problems. Furthermore, G-E contended that if it were to adopt the same standard applied by the automobile companies, no pay raise would be due G-E employees this year because their wages already had gone up more than the rise in the cost of living since 1940.

While Westinghouse resumed talks with the UEW on June 8, the first of such sessions since April 22, it made no wage increase offer.

It was understood that the Westinghouse "single uniform security package," proposed June 1 by Gwilym A. Price, president of the company, was coming up in the discussion.

This program would provide pensions, life insurance, sickness and accident insurance, hospital and surgical insurance. The company said that an employee with 30 years' service would be able to retire with a combined company pension and Social Security payments equal to about 40% of his average regular monthly pay.

Westinghouse would pay about two-thirds of the pension plan cost while the employee would pay 2 1/2% of his first \$3,000 of regular earnings and 5% of earnings above \$3,000. Should an employee leave the company all his contributions, with interest, would be refunded to him the company stated.

The estimated cost of the insurance to employees would range from 60 cents to \$1.45 a week, depending on the employee's base pay and number of dependents.

## Dealers Postpone Action On Fair Trade Decision

NEW YORK CITY—At the request of Monarch-Saphin Co., Inc., local appliance dealer, examination of the General Electric Co.'s fair trade contracts and its retail sales of fair-traded products has been postponed indefinitely.

Monarch-Saphin was granted the right to such examination by the New York County Supreme Court after it and seven other dealers had been temporarily enjoined from selling G-E products at less than fair-trade prices.

The dealers have not yet decided whether they will contest the issuing of permanent injunctions and bring the case to trial.

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